



GREATER MADISON  
**mpo**

## Regional Safety Action Plan



# Greater Madison MPO

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## Regional Safety Action Plan



July 2024

Prepared for: Greater Madison MPO

Prepared by: SRF Consulting Group

In association with: Alta Planning + Design and KL Engineering





# Greater Madison Metropolitan Planning Organization

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The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation or WisDOT.



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**Greater Madison MPO 2024 Resolution No. 9**  
**Adopting the Regional Safety Action Plan for the Greater Madison MPO**

**WHEREAS**, the Greater Madison MPO is the designated Metropolitan Planning Organization for the Madison, Wisconsin Metropolitan Area with responsibilities to perform regional transportation planning and programming, in cooperation with the Wisconsin Department of Transportation and Metro Transit, the major transit operator; and

**WHEREAS**, one of the primary responsibilities of the MPO is to prepare and approve a long-range regional transportation plan in accordance with the Infrastructure Investment & Jobs Act (IIJA), also known as the Bipartisan Infrastructure Bill (23 U.S.C. 104, 134) and implementing U.S. Department of Transportation (DOT) regulations (23 C.F.R. 450); and

**WHEREAS**, one of the primary goals of the *Connect Greater Madison 2050 Regional Transportation Plan* is to ensure that the transportation system enables all people to get to where they need to go safely with an emphasis on enhanced protection for vulnerable roadway users through use of a safe systems approach, thereby helping to achieve the long-term goal of eliminating fatal and serious traffic injuries; and

**WHEREAS**, the Greater Madison MPO has developed a Regional Safety Action Plan (RSAP) to provide a comprehensive framework using the Safe System Approach to reduce traffic fatalities and serious injuries on the regional transportation network with a goal of zero roadway fatalities and serious injuries by 2040; and

**WHEREAS**, the RSAP was developed through a collaborative process that included input from regional stakeholders, public agencies, community organizations, and the general public; and

**WHEREAS**, the RSAP identifies key safety concerns, sets performance targets, and outlines strategies and actions to improve transportation safety across the MPO metropolitan planning area; and

**WHEREAS**, the implementation of the RSAP will help support the Wisconsin Strategic Highway Safety Plan (SHSP), and align with national performance measure goals and National Roadway Safety Strategy set forth by the U.S. Department of Transportation (USDOT), supported by the Safe Streets and Roadway for All (SS4A) program; and

**WHEREAS**, the MPO will collaborate with local, regional, and state partners to implement the strategies and actions identified in the RSAP, leveraging available funding sources and seeking new opportunities to enhance transportation safety; and

**WHEREAS**, the MPO will monitor and report on progress towards achieving the safety performance targets outlined in the RSAP and will periodically update the RSAP as necessary to address emerging safety issues and reflect best practices:


**NOW, THEREFORE, BE IT RESOLVED** that the Greater Madison MPO hereby adopts the Regional Safety Action Plan as the guiding document for transportation safety improvements in the Madison metropolitan planning area.

**BE IT FURTHER RESOLVED** that the Greater Madison MPO hereby adopts a goal of zero roadway fatalities and serious injuries on regional roadways by 2040, and encourages all municipalities and transportation agencies within its jurisdiction to align their local safety initiatives with the RSAP and work collectively towards the shared vision of zero roadway fatalities and serious injuries.

June 5, 2024

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Date Adopted

A handwritten signature in black ink that reads "Mark Opitz". The signature is fluid and cursive, with the first name "Mark" and last name "Opitz" clearly legible.

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Mark Opitz, Board Chair  
Greater Madison MPO

## Acknowledgments

The Greater Madison Regional Safety Action Plan is a product of a collaborative effort and commitment from the MPO staff and Policy Board, Technical Coordinating Committee, Dane County Traffic Safety Commission, and the communities within the region.

## Technical Coordinating Committee

City of Fitchburg	Dane County Planning & Development, Highway and Transportation Department	Village of DeForest
City of Madison Engineering Department, Planning Division, and Traffic Engineering Division	Federal Highway Administration, WI Division	Village of McFarland
City of Middleton	Federal Transit Administration, Region V	Village of Oregon
City of Monona	Metro Transit	Village of Waunakee
City of Stoughton	Village of Cottage Grove	Village of Windsor
City of Sun Prairie		WisDOT Bureau of Planning & Economic Development
City of Verona		WisDOT Southwest Region

## Dane County Traffic Safety Commission

AAA Wisconsin	Greater Madison MPO	Sun Prairie Pedestrian Task Force
American Family Children's Hospital / Safe Kids	Madison Metro	Sun Prairie Police Dept.
Belleville Police Dept.	Madison Municipal Court	Sun Prairie Public Services
Blue Mounds Police Dept.	Madison Police Dept.	Town of Madison Police Dept.
CESA 2 Driver's Education	Madison Traffic Engineering	UW Extension
Cottage Grove Police Dept.	Marshall Police Dept.	UW Health Trauma Centers
Cross Plains Police Dept.	McFarland Police Dept.	UW Police Dept.
Dane Co. Court Commissioner	Middleton Police Dept.	UW TOPS Laboratory
Dane Co. District Attorney's Office	Monona Police Dept.	UW Transportation Services
Dane Co. EMS	Mount Horeb Police Dept.	Verona Police Dept.
Dane Co. Highway & Transportation	Oregon Police Dept.	Waunakee Police Dept.
Dane Co. Sheriff's Office	Public Health Madison & Dane Co.	WI Alcohol Policy Project
DeForest Police Dept	Safe Communities Madison-Dane Co.	WI Bike Federation
DeForest Public Works	Shorewood Hills Police Dept.	WI Dept. of Transportation/ Bureau of Traffic Safety
Fitchburg Police Dept.	SSM Health	WI State Laboratory of Hygiene
Fitchburg Public Works	Stoughton Police Dept.	WI State Patrol



## Letter from MPO



Every day more than half a million Dane County residents rely on the regional transportation system to get where they need to go. Tragically, not everyone makes it home. Since 2017, more than 250 lives have been lost on Wisconsin roadways, and over 1,400 people have suffered life-changing injuries. Alarming, both national and local statistics illustrate a concerning reality: bicyclists and pedestrians are more likely to be killed or seriously injured than anyone else on the road.

There is no way for us to bring those 250 people back, but we can make changes to our roadways to prevent future traffic fatalities. The Greater Madison Metropolitan Planning Organization's Regional Safety Action Plan serves as a blueprint to help the region achieve an ambitious target of zero roadway fatalities and injuries by 2040.

Grounded in data and informed by comprehensive public engagement, it identifies key priorities enhancing safety through the Safe Systems approach. We must rethink how we approach safety and prioritize safer roadway designs for all users, safe speeds, safe vehicles, and promote safe user behavior. Achieving this will require collaboration across different fields and areas of expertise, including planners, engineers, community advocates, public health professionals, educators, and law enforcement, along with the help of local elected officials and policymakers.

Most importantly, it starts with you. Together, we have the power to drive change by shifting behaviors and transforming conditions so that nobody has to endure the pain of losing a loved one to a roadway fatality again.

Alexandra Andros  
Greater Madison MPO Director

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[Regional Safety Action Plan Online Map](https://bit.ly/RSAPPriorityMap)

(<https://bit.ly/RSAPPriorityMap>)

## Acronyms and Abbreviations

BIL	Bipartisan Infrastructure Law
EMS	Emergency Medical Services
FHWA	U.S. Federal Highway Administration
HIN	High Injury Network
HSIP	Highway Safety Improvement Program
IJA	Infrastructure Investment and Jobs Act
KABCO	Injury Severity Scale: <ul style="list-style-type: none"><li>• K: Fatal Injury</li><li>• A: Suspected Serious Injury</li><li>• B: Suspected Minor Injury</li><li>• C: Possible Injury</li><li>• O: No Apparent Injury</li></ul>
MPO	Metropolitan Planning Organization
NCHRP	National Cooperative Highway Research Program
RRFB	rectangular rapid flash beacon
RSAP	Regional Safety Action Plan (Greater Madison Regional Safety Action Plan)
RTP	Connect Greater Madison 2050 Regional Transportation Plan
SHSP	Strategic Highway Safety Plan
SS4A	Safe Streets and Roads for All
SRTS	Safe Routes to School
STBG	Surface Transportation Block Grant Program
TCC	Technical Coordinating Committee
VRU	Vulnerable Road User
WisDOT	Wisconsin Department of Transportation

# Chapter 1: Why a Safety Action Plan?

## National Context

The Bipartisan Infrastructure Law (BIL) enacted by the U.S. Congress in 2021 established the Safe Streets and Roads for All (SS4A) Grant Program. The SS4A program provides discretionary grants to local, regional, and Tribal governments focused on the prevention of deaths and serious injuries on our local and regional roadway system. The SS4A program helps to implement the U.S. Department of Transportation's (USDOT) National Roadway Safety Strategy, which focuses on eliminating deaths and serious injuries across the nation's roadway system.

The Regional Safety Action Plan (RSAP) is the basic building block to guiding local and regional approaches through projects and strategies to

address safety risks on the roadway system. The SAP uses analysis of historic crash information combined with roadway system user and community input to identify projects and strategies. The U.S. Department of Transportation has adopted a Safe System Approach, which is a guiding paradigm in the development of the SAP.

## The Approach to Traffic Safety

The Safe System Approach is the foundational strategy for the Vision Zero movement and is proven to substantially reduce fatalities and serious injuries. USDOT has adopted the Safe System Approach to address contributing crash factors and promote layers of protection to prevent crashes and mitigate crash severity. This approach recognizes that humans make mistakes, humans are vulnerable, and redundant measures are needed to protect all road users.

### Traditional Approach

- Traffic deaths are inevitable
- Aims to fix humans
- Expects perfect human behavior
- Prevents crashes
- Exclusively addresses traffic engineering
- Doesn't consider disproportionate impacts

VS.

### Safe System Approach

- Traffic deaths are preventable
- Aims to fix systems
- Humans make mistakes
- Prevents fatal and serious crashes
- Considers the roadway system as a whole
- Considers road safety as an issue of social equity



The Safe System Approach is guided by five core elements.

## Core Elements of the Safe System Approach



## Vulnerable Road Users

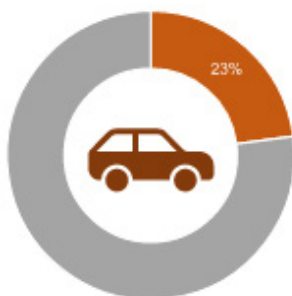
Vulnerable road users are people walking, biking, or rolling. People within a motor vehicle or on a motorcycle are not included in this definition. Vulnerable road users are unprotected from motor vehicles and are therefore especially vulnerable to the devastating impact of a motor vehicle crash. According to the National Highway Traffic Safety Administration, vulnerable road users accounted for a growing share of all roadway fatalities in recent years.<sup>1</sup> Just between the years 2020 and 2021, pedestrian fatalities were estimated to have increased by 13 percent and bicyclist fatalities by five percent. **The U.S. Department of Transportation labels this increase in fatalities with respect to vulnerable road users as a crisis and that “substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation’s roadways.”** It must also be added that the conditions and areas with additional risk to vulnerable road users likewise should be included in this call for action.



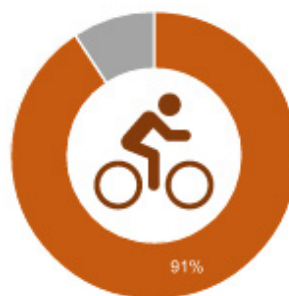
### Vulnerable Road User Severe Crashes in Greater Madison MPO

23% of vehicular crashes result in injury (KABC), whereas more than 90% of crashes involving a bicyclist or pedestrian result in injury (KABC).

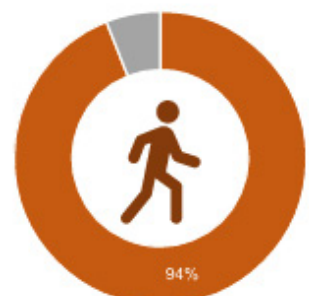
% Car crashes fatal or injury



% bike crashes fatal or injury



% ped crashes fatal or injury



1

<https://www.fars.nhtsa.dot.gov/Main/index.aspx>

# Chapter 2: Roadway Safety in the Greater Madison MPO

## About the Greater Madison MPO

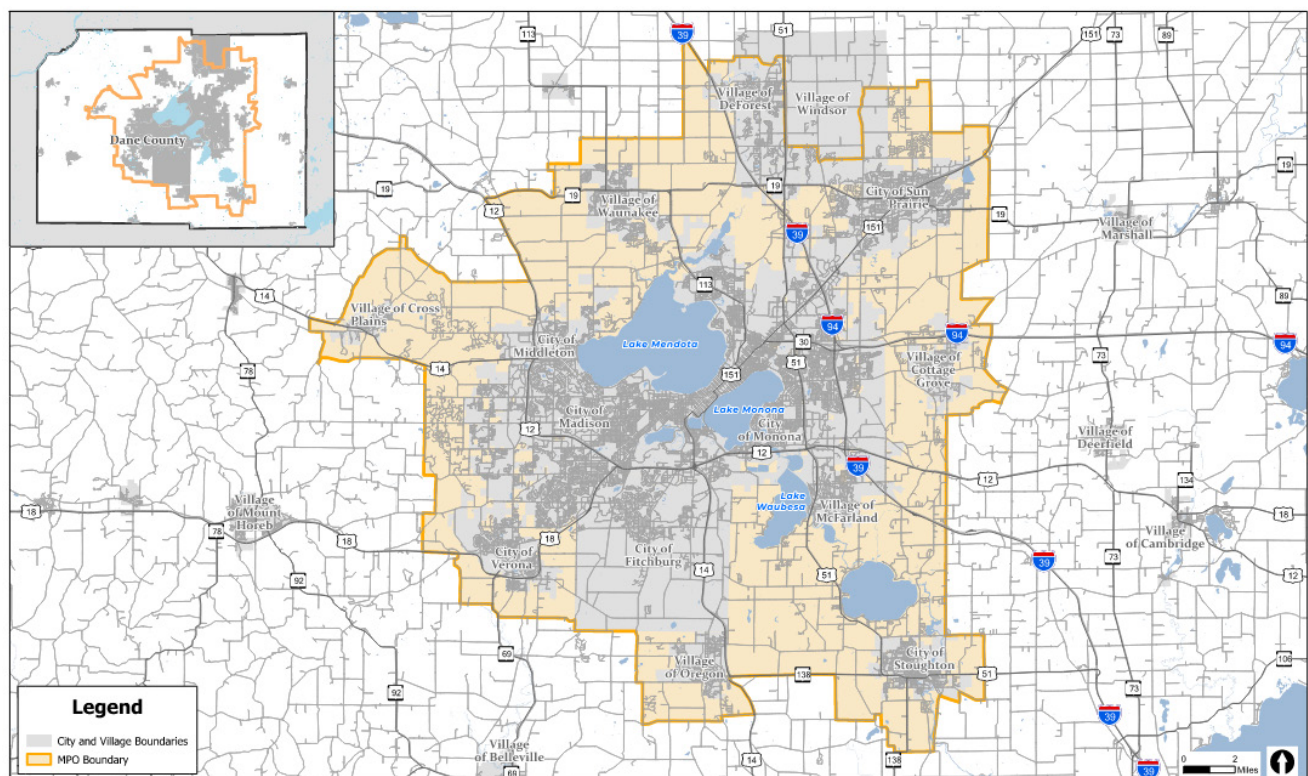
### CONNECTING PEOPLE, PLACES, AND OPPORTUNITIES

The Greater Madison MPO ("the MPO") is the federally designated Metropolitan Planning Organization (MPO) for the Madison Urban Area. The mission of the MPO is to lead the collaborative planning and funding of a sustainable, equitable transportation system for the greater Madison region. The MPO brings communities together

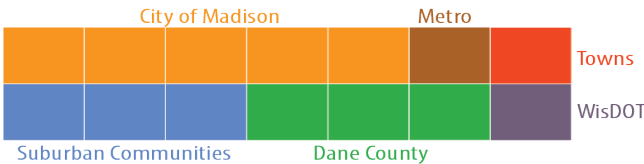
to prioritize, coordinate, and fund transportation projects in the region, while supporting regional land use, environmental, and economic objectives.

The MPO's Metropolitan Planning Area includes the Madison Urban Area and all or portions of the 34 contiguous villages, cities, and towns that are or are likely to become urbanized within the 20+ year planning period as well as other areas containing important regional transportation corridors, as shown in Figure 1 Greater Madison MPO Map. Federal rules require the designation of MPOs in urbanized areas of 50,000 or more in population as a condition for spending Federal highway and transit funds. The MPO is the official policy body responsible for administering the cooperative, comprehensive regional transportation planning and decision-making process for the Madison Metropolitan Planning Area.

Figure 1 Greater Madison MPO Map



The MPO is required to develop and maintain a long-range multi-modal regional transportation plan every five years. It develops special plans and studies, such as the Dane County Bicycle & Pedestrian Crash Study, and collects data to help inform and drive implementation of the regional transportation plan, and approves federal funding for transportation projects through the annual Transportation Improvement Program (TIP). While the MPO provides regional coordination and approves use of Federal transportation funds within the metropolitan planning area, responsibility for the implementation of specific transportation projects lies with WisDOT, Dane County, City of Madison, and other local units of government as transportation providers.



The MPO is governed by a 14-member Policy Board appointed by the local units of government within the Metropolitan Planning Area, Dane County, and WisDOT. The Policy Board is made up of elected officials, officials of public agencies that administer or operate major modes of transportation in the metropolitan area, and appropriate State officials. The Policy Board is advised by the MPO’s Technical Coordinating Committee (TCC), which reviews, coordinates, and advises on transportation planning matters. The TCC is comprised of engineers, planners, and other professionals who represent local governments and transportation agencies.

## Why the MPO Needs a Regional Safety Action Plan

The loss of even one human life on a roadway is unacceptable. From 2017 – 2021, 170 people died from roadway crashes within the MPO region. Hundreds more experienced life altering and serious injuries. Between 2020 and 2050, the population within the region is expected to grow by 35%, adding nearly 195,000 additional residents and users of the roadway network to drive, bike, walk, and roll. Therefore, increasing the opportunity for collisions.

Population Growth

Multimodal Demand

Regional Public Health

The contiguous villages, cities, and towns, within the region must collaborate together with the MPO, Dane County, and WisDOT to work toward the shared goal of improving safety for all roadway users and access to medical facilities when crashes do occur.

The MPO also acknowledges that connectivity for all roadways users is imperative. With population growth expected over the next 30 years, the region’s roadways will become burdened, affecting resident’s quality of life. The region must continue to identify and fill gaps within the region’s bicycle, pedestrian, and transit network to encourage healthy communities.



## Vision and Goals

The MPO desires transformative change in order to achieve it's vision for the safety of it's transportation infrastructure. Eliminating fatalities and serious injuries requires the region's transportation leadership and staff to prioritize the issue, and to work closely with it's transportation partners to do the same. Achieving the vision requires tremendous effort



**Zero traffic deaths and severe injuries on streets within the MPO by 2040**

focused on physical engineering efforts and various non-engineering efforts, such as education, enforcement, and agency collaboration. **The MPO's vision will be measured on an annual basis starting in 2025, by the percent reduction in fatal and serious injury crashes.** These measures are already a part of the MPO's [Performance Measures Dashboard](#), which includes federally required safety reporting. The following goals outline the big picture efforts in working toward the vision to reduce all traffic deaths and severe injuries on streets within the MPO Zero by 2040. To achieve zero fatalities, the MPO identified the following goals for the region:

Goal 1: Elevate the need to address safety improvements for all users across the regional transportation system.	Goal 2: Collaborate with partner agencies in a shared mission to improve transportation safety and create a culture of safe driving behavior.	Goal 3: Invest in equitable transportation safety improvements.
<b>OBJECTIVES</b> A. All street crossings are compliant with the American with Disabilities Act. B. Enhance protection for vulnerable roadway users to ensure that all people can get to where there need to go safely. C. Identify sidewalk and trail gaps to help connect existing sidewalks and paths and keep vulnerable users off the roadway. D. Close lighting gaps across the transportation system.	<b>OBJECTIVES</b> A. Partner with city, village, and town staff to systematically improve safe driving, cycling, walking and rolling. B. Partner with agencies and their school districts to systemically improve the safety of routes to schools within the region. C. Continue to partner with the state Department of Transportation to improve the safety of state routes and federal aid-eligible routes in the region. D. Closely monitor driver behavior in HIN areas. E. Provide special focus on enforcement and education efforts. F. Promote awareness of traffic rules.	<b>OBJECTIVES</b> A. In order to provide a safe alternate mode for vulnerable users, support existing transit service and efforts to expand transit service. B. Provide convenient, affordable transportation options that enable all people access to where they would like to go. C. Engage traditionally underrepresented groups to ensure that the benefits from the regional transportation system are fairly distributed.

## Chapter 3: State of Practice



Several plans, policies, and programs address road safety at the international, national, state, and local levels. State and local laws governing the operation of motor vehicles are primarily designed to promote road safety.

National policies and programs include the Complete Streets movement, Safe Routes to School (SRTS), Operation Lifesaver, and the Americans with Disabilities Act (ADA). These policies emphasize the need to accommodate all travel modes.

Statewide plans include the Highway Safety Plan (2022), Strategic Highway Safety Plan (2023–2027), and the Local Road Highway Safety Improvement Program (HSIP). WisDOT's top priority is to ensure safety for all road users.

At the local level, the communities within the MPO region lead traffic safety efforts focusing on local priorities and recommendations for future road improvements within their jurisdiction. The communities within the MPO region continue to coordinate with the MPO; however, their Safety Action Plans and analysis may differ slightly due to the difference in priorities and scale – regional vs. local community-based.

The MPO and communities within the Dane County area have also completed the following plans, policies, and programs. These documents include a wide range of activities the region is undergoing to address roadway safety.

- Connect Greater Madison: 2050 Regional Transportation Plan (2022)
- Madison MPO Intersection Safety Network Screening (2019 & 2022)
- Bicycle Transportation Plan for the Madison Metropolitan Area and Dane County (2015)
- Dane County Bicycle and Pedestrian Crash Study (2018)
- Pedestrian/Bicycle Facility Requirements, Policies, & Street Standards: Review of Community Requirements in the Greater Madison MPO Planning Area and Recommended Best Practices (2021)
- City of Madison Vision Zero Action Plan (2022)
- City of Sun Prairie Vision Zero Initiative (in progress)
- Dane County Traffic Safety Commission (TSC) Traffic Safety Emphasis Areas & Work Plan
- Surface Transportation Block Grant (STBG) Program

See Appendix 1 for a summary of additional safety activities completed at the state, national, and international level.

## Connect Greater Madison: 2050 Regional Transportation Plan (2022)

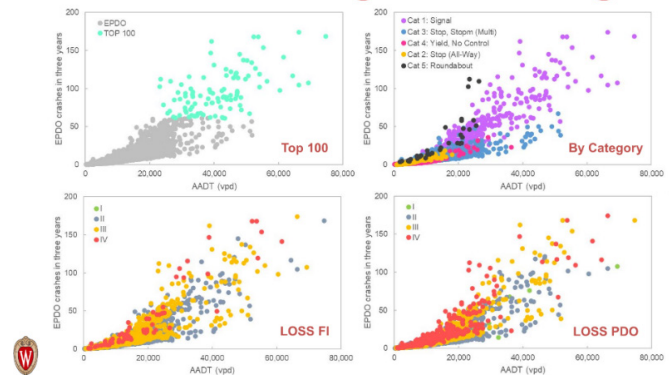


- The purpose of the Regional Transportation Plan (RTP) is to help identify how the region should invest in the transportation system to accommodate current and future travel demands. The Greater Madison Area has experienced aggressive growth in the last 20 years and is estimated to continue to grow between 2020 and 2050. A well-planned transportation network is critical to meet the needs and goals of the region.
- The RTP is updated every five years and is created to help set the framework for how the region will build, manage, and operate its multi-modal transportation system. The RTP identifies six goals in which specify the policies, projects, and strategies to obtain these goals. Performance measures are determined in order to track progress.
- Safety is one of the six main goals of the plan.. This includes an emphasis on enhanced

protection for vulnerable roadway users through the use of the safe systems approach. These goals are incorporated into looking at the future of our transportation system, determining critical issues, new technologies, and considering all modes of transportation to determine key needs and recommendations on how to implement changes and improvements within our transportation system.

## Madison MPO Intersection Safety Network Screening (2019 & 2022)

### Network Screening and Ranking



- The University of Wisconsin Traffic Operations and Safety (TOPS) Laboratory developed a crash prediction model using 2017-2020 WisDOT collision data to identify high-risk locations. The results of the network screening and ranking of high-risk segments resulted in a level of safety score (LOSS) and ultimately the high injury network.
- The network screening consisted of analyzing 4,602 intersections and 2,841 corridors. The data collected included traffic, signal control, speed limit, geometry, crashes, and more.
- To predict crashes per year, the statistical modeling took into account for overdispersion in crash data to develop safety performance functions for each category: Signal, Stop (All-Way), Stop and Stop (Multi), Yield and No Control, and Roundabout.



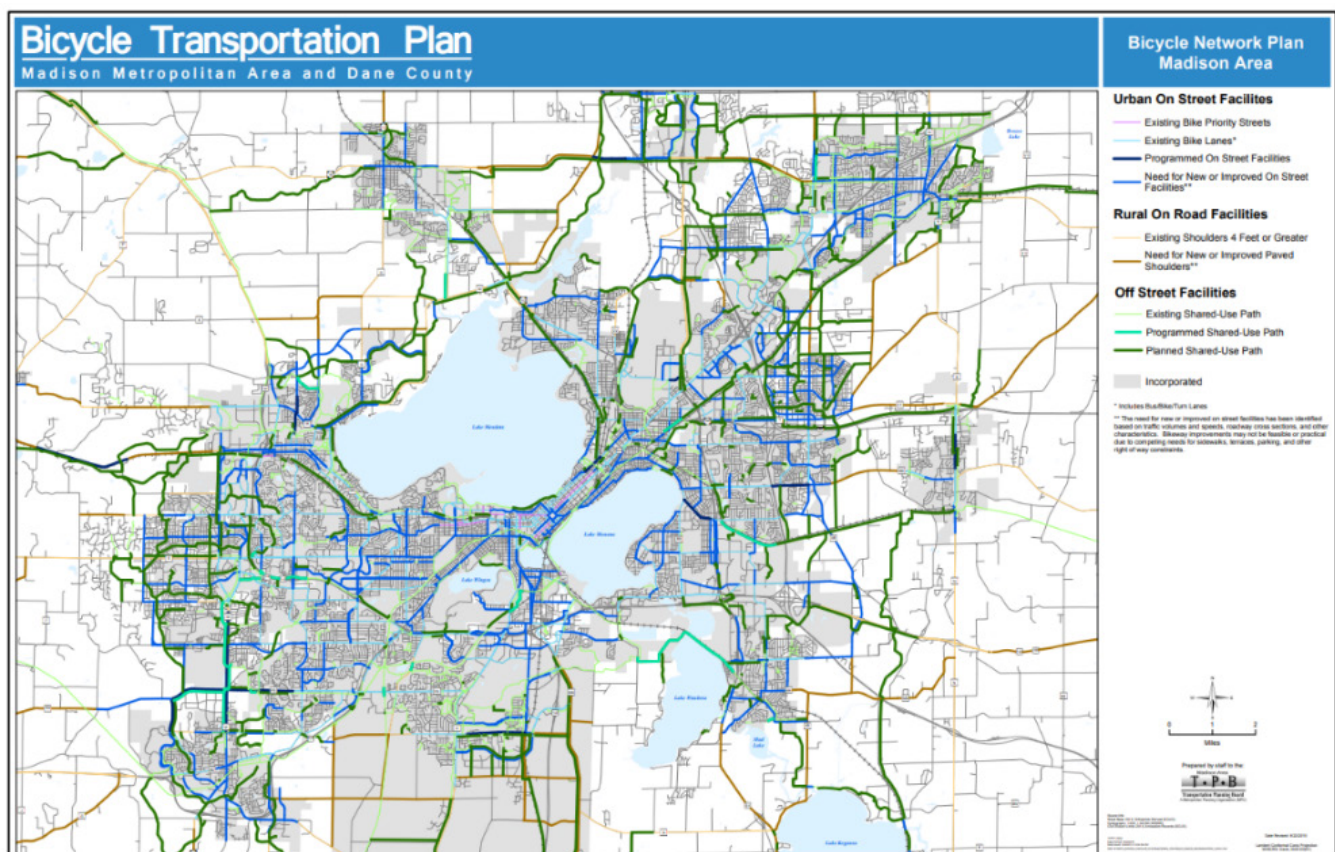
## Bicycle Transportation Plan for the Madison Metropolitan Area and Dane County (2015)

- The goal of the Bicycle Transportation Plan is to serve as a blueprint for continuing to provide and improve bicycle conditions and safety throughout Dane County for all levels of bicycling experience. The plan's vision extends to the year 2050 with the following six main goals:
  - Safety
  - Usage
  - Connectivity
  - Equity
  - Livability
  - Longevity
- The strategies behind the plan include adopting the seven "E's" to help identify strategies to obtain their goals:
  - Education
  - Encouragement
  - Enforcement
  - Engineering
  - Envisioning (Planning)
  - Evaluation
  - End of Trip Facilities and Multi-Modal Connections

- Overall, the plan includes exploring a toolbox of different bicycle facilities that can be provided along the network to improve conditions. Recommendations in the plan include a combination of on-street and off-street improvements to the bicycle network, including enhancing existing facilities as well as future bicycle facilities. Additionally, the plan looks to encourage bicycling within the community by increasing the number of bicyclists and creating an active bicycling culture.
- The MPO will begin developing an Active Transportation Plan in late 2024, which will update the 2015 Bicycle Plan and incorporate the pedestrian network.

## Dane County Bicycle and Pedestrian Crash Study (2018)

- The Dane County Bicycle and Pedestrian Crash Study analyzed crashes involving a bicyclist and/or pedestrian between 2011 – 2015 to identify trends, common features, characteristics, and locations to assist in improving safety for these users. Additionally, other plan goals included assessing the changes in bicycle safety in the





City of Madison, since a study was completed in 1992 and setting a benchmark for future safety performance measures throughout the area.

- The study included an extensive review of bicycle and pedestrian-related crash reports over the analysis period. It was determined that speeding, impairment, inattention, and failing to obey traffic controls are attributed to the majority of the crashes. These dangerous behaviors can be addressed through education and enforcement. Continuing to provide engineering solutions also helps to mitigate the risk of crashes at specific locations.

## Pedestrian/Bicycle Facility Requirements, Policies, & Street Standards: Review of Community Requirements in the Greater Madison MPO Planning Area and Recommended Best Practices (2021)

- The goal of this report is to review locally adopted pedestrian/bicycle requirements, national recommendations, and best practices to help local planning and engineering staff and elected officials to make informed decisions when it comes to decisions regarding the development and design of roadways to make them safe for all users.
- The report explores different aspects of the roadway facility including streets; sidewalks, separated paths, bicycle lanes; non-motorized access and circulation standards; equity considerations; and accessibility. Standards and requirements that are currently being provided by Madison area cities, villages, and towns are included to assist in overall recommendations for future policy and design standards.

## City of Madison Vision Zero Action Plan (2022)

- The City of Madison's Vision Zero Action Plan aims to eliminate all fatal and serious injury crashes on city streets by 2035. To achieve this goal, the priority of the transportation system needs to be shifted from moving vehicles as efficiently as possible to prioritizing safe, healthy, and equitable mobility for all roadway users.
- The City's Vision Zero Action Plan and analysis differ slightly from the Regional Safety Action Plan due to the difference in priorities, data available and scale.
- The plan outlines strategies and actions that need to be taken to achieve the vision zero goal, however, it is intended to be a "living" document that can be changed to address city needs as they evolve.
- The guiding principles of the Vision Zero plan include the following:
  - Prioritizing Safety
    - » Designing streets for people instead of vehicles.
    - » Take the focus away from trying to make it safer for personal vehicles to move efficiently through the network to focus on safe mobility for all roadway users.
  - Data Driven
    - » Relies on a data-driven process to determine the best strategies to be implemented and where they would be most effective.
    - » Expand on data analysis by not just relying on traffic engineers, but involving policymakers, public health officials, police departments, civil rights advocates, and other stakeholders.
  - Equity
    - » Reduce geographic and racial disparities in crashes by prioritizing street design safety efforts in locations that have been historically marginalized.
    - » Focus on designing roadways and cultivating a driving culture that puts safety first instead of speed. Understanding that

increasing enforcement will not lead the way to zero deaths and severe injuries. Enforcement policies should focus on hazardous behaviors that make an impact on safety, instead of disproportionately targeting people of color.

- Engagement
  - » Involving and receiving input from community members will help build the foundation of the plan and the strategies that should be incorporated to make a safer and more equitable roadway infrastructure.
- “Let’s Talk Streets” is an engagement project that the city has started to gather more information regarding ongoing projects. The goal is to help engage the community and make sure their values and goals are being met and heard.
- The safe systems approach is used in the action plan to address the main factors that lead to death in crashes. The action plan uses the following factors of the safe systems approach:
  - Safe Streets
  - Safe People
  - Safe Vehicles
  - Safety Data
  - Safety Focused Enforcement

Strategies were developed for each one of these factors to take action and move towards the commitment to zero deaths on city streets.



## City of Sun Prairie Vision Zero Initiative

- The City of Sun Prairie’s Pedestrian Safety Task Force has undertaken the goals of the Vision Zero initiative. Their goal is to reach zero fatalities and serious injuries to travelers by effective education, engineering, enforcement, and data analysis.
- The City’s Director of Public Works/City Engineer leads the Pedestrian Safety Task Force and has representatives from engineering, public works, Sun Prairie utilities, neighborhood

navigators, police and fire departments, and building inspection. They specifically focused on safety and creating solutions that will enhance pedestrian safety within their community.

- Some actions they have completed to date include reducing speed limits along certain roadways, using the Transportation Hazard Reporter app for the community to report pedestrian safety hazards, and community involvement events to be able to connect with the task force on ideas and safety improvement strategies.

## Dane County Traffic Safety Commission (TSC) Traffic Safety Emphasis Areas & Work Plan

- The Dane County TSC work plan includes three smart objectives. This includes holding quarterly multi-disciplinary meetings, using a data-driven process, identifying issues, and developing recommendations to reduce deaths and severe injuries. Additional objectives include implementing projects, creating partnerships that will focus on the four priority areas, and raising awareness of traffic safety in the county.
- The four priority areas include the following:
  - Reducing Risky Driving Behavior
    - » Action items include outreach supporting enforcement, expanding data-informed enforcement, improving distracted driving data collection & identifying countermeasures, and educating on graduated driver licensing.
  - Reducing Impaired Driving
    - » Action Items include submitting NHTSA’s drug-impaired driving evaluation tool, promoting ARIDE training & DRE certification, expanding and coordinating multijurisdictional OWI enforcement, expanding uptake of Place of Last Drink program, and safe communities OWI education campaign.
  - Pedestrian Crashes

- » Action Items include an education campaign coinciding with enforcement and a pedestrian safety task force.
- Racial Disparities with Traffic Injuries
  - » Action Items include organizing a summit on racial disparities with traffic injuries, creating a communication campaign to coincide with the summit, and improving safety features with older vehicles.
- The four priority areas will be re-evaluated biennially.
- A Law Enforcement subgroup was formed to coordinate enforcement efforts, improve data collection and reporting, and promote and provide training/educational opportunities.

## Surface Transportation Block Grant (STBG) Program

- The Greater Madison MPO solicits funding for projects biennially for FHWA STBG-Urban funding (formerly STP). This funding may be used for projects to preserve and improve the conditions and performance on any Federal-aid roadway, for bridge projects on any public roadway, for pedestrian/bicycle infrastructure or programs, and for transit capital projects.
- The various types of projects all have minimum total project costs that are required. Additionally, for the 2024-2029 program cycle, the federal share for new projects will be 65% and the local share will be 35%, for projects costing more than \$1,000,000 and the standard 20% local match will be applied for projects not exceeding \$500,000. Projects between \$500,000 and \$1,000,000 will be based off a sliding scale for cost share.
- Two types of criteria are used in the STBG project section process:
  - Screening Criteria
    - » Ensures that the project meets eligibility requirements, consistent with the goals adopted by Connect Greater Madison: 2050 Regional Transportation Plan (RTP), has local policy body commitment, and a reasonable expectation of implementation.
  - Scoring Criteria
    - » Designed to incorporate the goals of the Connect Greater Madison: 2050 Regional Transportation Plan and goals of the Infrastructure Investment and Jobs Act (IIJA).
- Scoring to approve possible funded projects includes the following seven categories:
 

• Importance to the regional transportation system	• Safety enhancement
• System preservation	• Enhancement of multi-modal options/service
• Congestion mitigation/TSM	• Environment
	• Equity

Scoring for the various types of projects has different weighted values, which reflect on the relevance and significance of each category.

## Greater Madison MPO Complete Streets Policy

- The Greater Madison MPO adopted a Complete Streets Policy in 2023. The community's input was considered in the planning process to meet safety and equity priorities outlined by the MPO. The goal of the Complete Streets Policy is to promote the development of complete streets projects that are equitable, safe, sustainable and accommodate for all modes of transportation.
- The MPO prioritizes projects in areas that have historically been underinvested in. These neighborhoods lack the infrastructure and facilities needed for an equitable transportation system. The policy is also designed to help serve the needs of disadvantaged communities, such as racial and ethnic minorities and low-income populations.
- The MPO will measure the performance related to the development of the complete street networks annually by monitoring transit ridership, bicycle utilization, pedestrian and bicycle fatalities.

## ADA Transition Plans

- With respect to transportation, the goal of the Americans with Disabilities Act (ADA) is to ensure that pedestrians with disabilities (who may use mobility devices) have an equal opportunity to use the public rights-of-way in the transportation system.
- The Greater Madison MPO provides assistance to agencies within the region to develop their local ADA Transition Plan.





## Chapter 4: Engaging the MPO's Communities

Community feedback is critical in ensuring the Plan's applicability and efficacy in the Greater Madison MPO region. Outreach to the community is important as the Plan will be used by the MPO agencies within the region, and other partners to make decisions impacting the community for the foreseeable future.

Robust community engagement and stakeholder outreach was completed as a part of the [Connect Greater Madison Regional Transportation Plan \(RTP\) 2050](#) through 2021. The following activities were conducted to gather community feedback:

See Appendix 2 for the RTP 2050 Public Participation and Responses to Comments.

### COMMUNITY FOCUS GROUP CONVERSATIONS

The effort included three different focus groups with Sun Prairie, Bayview and the Latino Academy focus group which had participants who lived in Madison, Fitchburg, Verona, Sun Prairie, Oregon, Middleton, Blue Mounds and Belleville combined. The Bayview Foundation session also included members from the Hmong community while the Sun Prairie session included seniors with limited mobility. At each of the focus group meetings attendance ranged from 4 to 15 people. The two Latino Academy sessions were facilitated in Spanish. These focus groups all occurred in May, 2021. The key themes of the conversations included:

- Cost of transportation
- Desire for more convenient public transit
- Knowledge and language barriers
- Access for people with disabilities and seniors
- Impacts on family and community
- Bicycling pros and cons

### CONNECT GREATER MADISON 2050 REGIONAL TRANSPORTATION PLAN WEBSITE



The MPO created a [website for the 2050 RTP](#) to increase public engagement in the planning process and engage residents. The website contains project news, information about the planning process, a timeline and links to related plans and other additional information about the MPO.

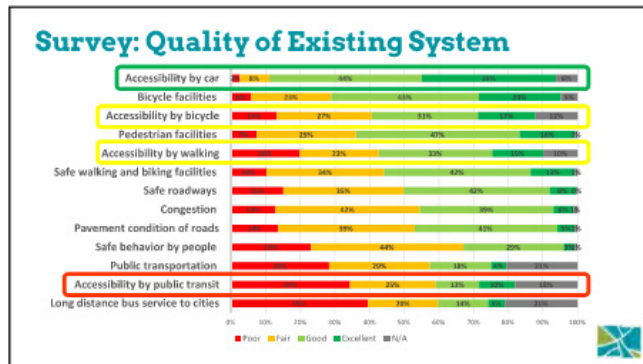


Bayview





## RTP PUBLIC SURVEY FULL RESULTS



A public survey was conducted where participants could respond to various transportation related questions. The 18 questions focused on the quality of the transportation system, potential projects, perceived issues, policies, funding, performance, and demographics. Participants were able to answer the questions through a multiple-choice method alongside written responses. The survey received 274 responses and included the following key themes:

- Safety
- Bike and pedestrian infrastructure
- Connectivity
- Smart growth
- Equity Considerations
- Transit Accessibility
- Broadband and Telework

The final results of the public survey were summarized and presented at the MPO Policy Board in August 2021.

## PUBLIC INVOLVEMENT MEETINGS

Three virtual public involvement meetings were held from Winter 2021 to Spring 2022. Attendance ranged from 5 to 17 residents with backgrounds from nonprofit or advocacy groups, local county government staff or elected officials, as well as some interested community members. The first meeting included an overview of the RTP plan goals and information on the MPO growth. Attendees were polled where they worked and what they believed was the most important transportation issue facing the region. Attendees indicated a variety of answers including expanding transportation funding, improving equity in transportation improving public transportation, planning for automated/driverless vehicles, reducing impacts on climate change, improving walkability and bikability. The second and third meeting contained an updated overview of the planning process as well as more Q&A sessions. All three meetings were recorded and posted to the MPO YouTube page.

## RTP COMMENT MAPS

The MPO invited the public to provide feedback through [an interactive map](#) (See Figure 2) of the existing transportation system in the greater Madison area. Participants were able to add pins and lines to indicate the location of their comments. The map was available for comment from August through October 2021 and received over 1300 unique comments including over 627 specific safety concerns, which included the following areas of safety concern:



- Barriers to accessible routes.
- Gaps in network.
- Concentrated in areas developed under auto-centric paradigm.
- Unsafe or otherwise problematic crossings and barriers.
- Concentrated in the Isthmus, near west, and near east of Madison, but also throughout Middleton, SW Madison, S Madison, NE Madison, Fitchburg, McFarland, Sun Prairie, and Waunakee.
- Locations where lack of snow removal poses issues for crossings, connections, or bus stops.



- Train horns, stop consolidation, integrating Monona service, route and schedule variability, requests for water taxi/ferry, and requests for specific origin-destination pairs.
- Suggestions for specific commuter service.
- Service to peripheral areas.
- Suggest inter-city and rail.
- Increased service frequency and capacity.
- Stop comments include problems with access to stops, level of infrastructure or amenities.

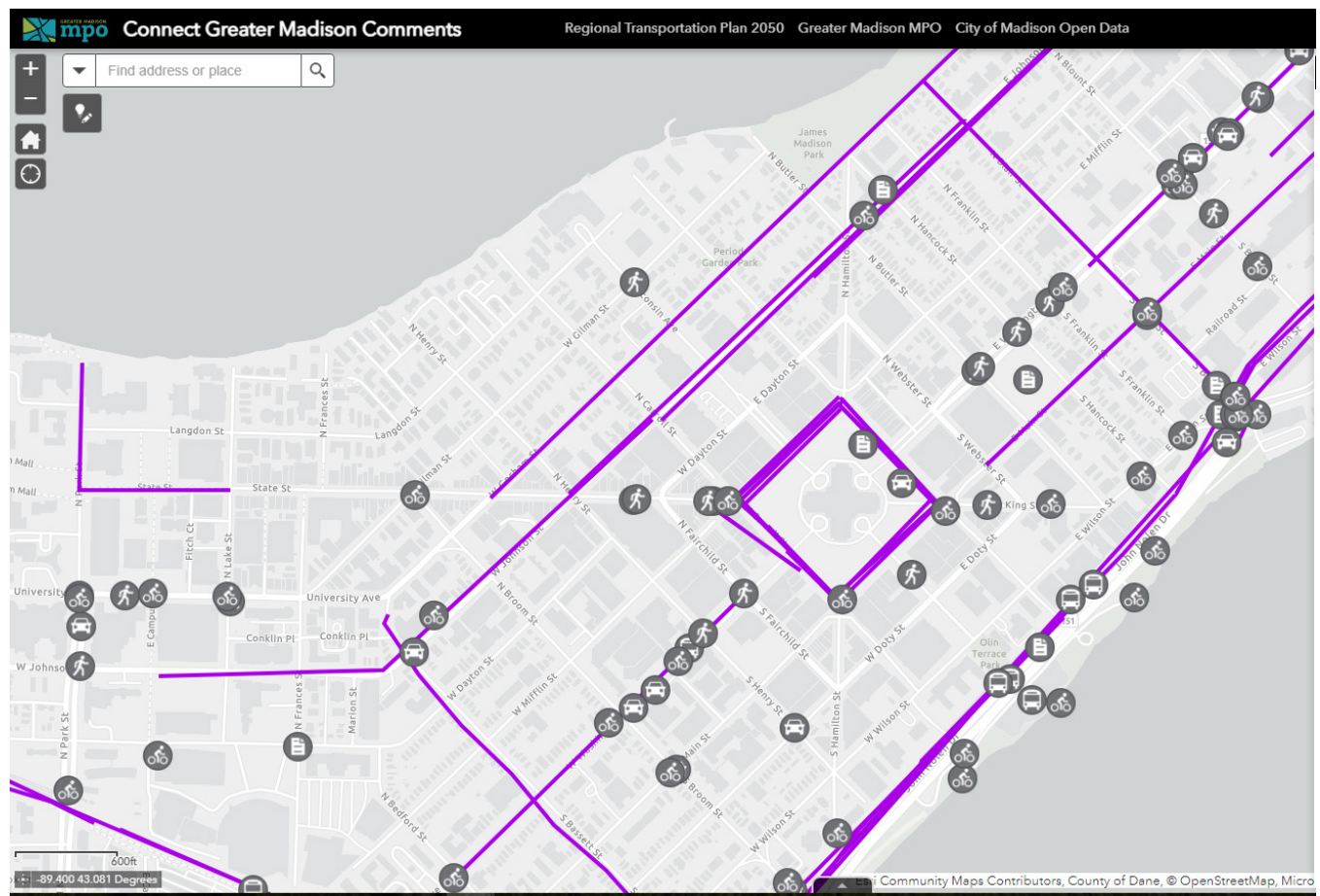


- Requests for new BCycle docks.
- Needed facilities and suggested improvements scattered throughout.
- Road design and crossing, especially in the City of Madison.
- Poor pavement conditions, inadequate snow removal, encroaching foliage, and path/tunnel flooding problems.
- Better speed limit enforcement, suggested policy changes, and requests for additional signage.



- Complete streets, road diets, traffic calming, new roadway connections, design of intersections, interchanges and their attendant features.
- Maintenance comments where lane markings are needed or have worn away.
- Surface condition is poor.
- Operation of intersections and/or drivers ignoring traffic control devices at intersections.
- Turning movement problems, margining/weaving, signal timing, transit lanes, and traffic control devices.
- Speed related comments.

Figure 2 2050 Regional Transportation Plan – Comment Map



### TECHNICAL COORDINATING COMMITTEE

The MPO's Technical Coordinating Committee (TCC), which reviews, coordinates, and advises on transportation planning matters advises the Policy Board. The TCC is comprised of engineers, planners, and other professionals who represent local governments and transportation agencies. The TCC meets monthly on the last Wednesday of each month. The TCC has been heavily involved with reviewing and providing feedback through the development of the Greater Madison MPO Safety Action Plan.

Agencies represented on the TCC include:

- City of Fitchburg
- City of Madison Engineering Department
- City of Madison Planning Division
- City of Madison Traffic Engineering Division
- City of Middleton
- City of Monona
- City of Stoughton
- City of Sun Prairie
- City of Verona
- Dane County Planning & Development
- Dane County Highway and Transportation Department
- Federal Highway Administration, WI Division
- Federal Transit Administration, Region V
- Metro Transit
- Village of Cottage Grove
- Village of DeForest
- Village of McFarland
- Village of Oregon
- Village of Waunakee
- Village of Windsor
- WisDOT Bureau of Planning & Economic Development
- WisDOT Southwest Region

## DANE COUNTY TRAFFIC SAFETY COMMISSION



Each year, thousands of Wisconsin residents are injured and killed in traffic crashes. In an effort to prevent these tragedies, in 1971 the legislature created [traffic safety commissions \(TSC\)](#) in every county. These commissions are intended to bring local and state expertise to minimize the incidence and severity of traffic crashes. The Dane County TSC is made up of over 52 public and private organizations representing local law enforcement and first responders, transportation professionals, public health, area hospitals, driver education, and community advocates. The Dane County TSC meets quarterly to review fatal and injury crashes that occurred in the county, discuss traffic safety issues, and identify and implement strategies to make Dane County roadways safer for all.

In 2020 the Dane County TSC received grant funding from WisDOT to: increase the capacity of the TSC through expanding community partnerships; develop a data-driven, system level, action-oriented process model to guide the TSC's work; and develop mechanism for gathering community input from across county to identify

concerns and jointly develop local strategies and mobilize community to take action.

As part of this process, a series of local community traffic safety surveys and listening sessions were held across Dane County. Listening sessions included first responders involving fire/police/EMS, elected officials, public works staff, school districts, and local residents. The listening sessions reviewed local crash data, identified local safety concerns (both general and location specific), and included discussions on safety efforts currently underway in each community. Over 800 responses were received as part of the community safety surveys. The top concerns heard included:

- Bike and Pedestrian safety (including failure to yield to bikes and pedestrians)
- Speed
- Inattentive/Distracted/Aggressive Driving

An inaugural Annual Data Review and Prioritization meeting was held in July 2021. After reviewing the data and hearing about the key takeaways from the local listening sessions, participants identified four emphasis areas and formed work groups to identify action-oriented implementable strategies. The four emphasis areas included:

- Reduce risky driving behavior (speed, distracted/inattentive driving, and occupant protection)
- Reduce impaired driving
- Improve pedestrian safety
- Reduce racial disparities with traffic injuries

The data is reviewed annually, and priority areas (and workgroup plans) identified every two years.



Agencies representing the Dane County TSC include:




- AAA Wisconsin
- AARP Wisconsin
- American Family Children's
- Hospital / Safe Kids
- Belleville Police Dept.
- Blue Mounds Police Dept.
- CESA 2 Driver's Education
- Cottage Grove Police Dept.
- Cross Plains Police Dept.
- Dane Co. Court Commissioner
- Dane Co. District Attorney's Office
- Dane Co. EMS
- Dane Co. Highway & Transportation
- Dane Co. Sheriff's Office
- DeForest Police Dept
- DeForest Public Works
- Fitchburg Police Dept.
- Fitchburg Public Works
- Greater Madison MPO
- LIUNA Wisconsin
- Madison Metro
- Madison Municipal Court
- Madison Police Dept.
- Madison Traffic Engineering
- Maple Bluff Police Dept.
- Marshall Police Dept.
- McFarland Police Dept.
- Middleton Police Dept.
- Monona Police Dept.
- Mount Horeb Police Dept.
- Oregon Police Dept.
- Public Health Madison & Dane Co.
- RSVP of Dane County
- Safe Communities Madison-Dane Co.
- Shorewood Hills Police Dept.
- SSM Health
- Stoughton Police Dept.
- Sun Prairie Pedestrian Task Force
- Sun Prairie Police Dept.
- Sun Prairie Public Services
- UW Extension
- UW Health Trauma Centers
- UW-Madison Police Dept.
- UW TOPS Laboratory
- UW Transportation Services
- Verona Police Dept.
- Waunakee Police Dept.
- WI Alcohol Policy Project
- WI Bike Federation
- WI Dept. of Transportation/
- Bureau of Traffic Safety
- WI State Laboratory of Hygiene
- WI State Patrol
- WI State Capitol Police





## What was heard?

As a result of the robust public outreach and stakeholder engagement, the following key themes were gathered. These key themes assisted in informing the recommended countermeasures as a part of this Safety Action Plan.

 <b>Vehicle and Roadway</b>	 <b>Active Transportation</b>	 <b>Education and Enforcement</b>
<ul style="list-style-type: none"> <li>• Improve pavement conditions</li> <li>• Roadway changes to improve safety (examples include updating pavement markings, adding designated turn lanes, building roundabouts).</li> <li>• Decrease vehicles miles traveled.</li> <li>• Reduce driving speeds.</li> <li>• Increase transportation options for seniors, youth, and people with mobility limitations.</li> </ul>	<ul style="list-style-type: none"> <li>• Unsafe to bike on the street.</li> <li>• More bike paths desired.</li> <li>• More sidewalks are desired, especially in residential areas.</li> <li>• More snow and ice removal on paths.</li> <li>• Improves bike and pedestrian crossing infrastructure, including protected intersections.</li> <li>• Poor driver compliance at pedestrian crossings.</li> <li>• Increase visibility.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce impaired driving.</li> <li>• Prevent drag racing</li> <li>• Prevent or reduce reckless driving (speed/aggressive driving)</li> <li>• Red light running enforcement</li> <li>• Reduce distracted driving, including using cell phones.</li> <li>• Reduce racial disparities.</li> </ul>

# Chapter 5: Data Evaluation

## Crash Summary and Crash Profiles

Between 2017 and 2020, over 28,000<sup>2</sup> crashes were recorded within the MPO, of which over 600 resulted in fatal or serious injuries. An analysis of these crashes was completed to identify crash trends among three modes: automobile, bicycle and pedestrian. The analysis includes an examination of the crashes by mode by basic crash report variables such as crash characteristics and contextual roadway factors. The crash trends identified the MPO’s crash profiles which highlight specific conditions that account for a large share of fatal and serious injury crashes. These crash profiles may be used by the MPO and region to help prioritize roadway safety investments in the future (See **Appendix 3** for the Crash Profile Memo).



Throughout the safety analysis, crash trends are summarized by “**KA**” indicating fatal and serious injury crashes and “**BCO**,” which includes non-serious injuries. The KABCO injury scale is used and includes the designations shown in Table 1.

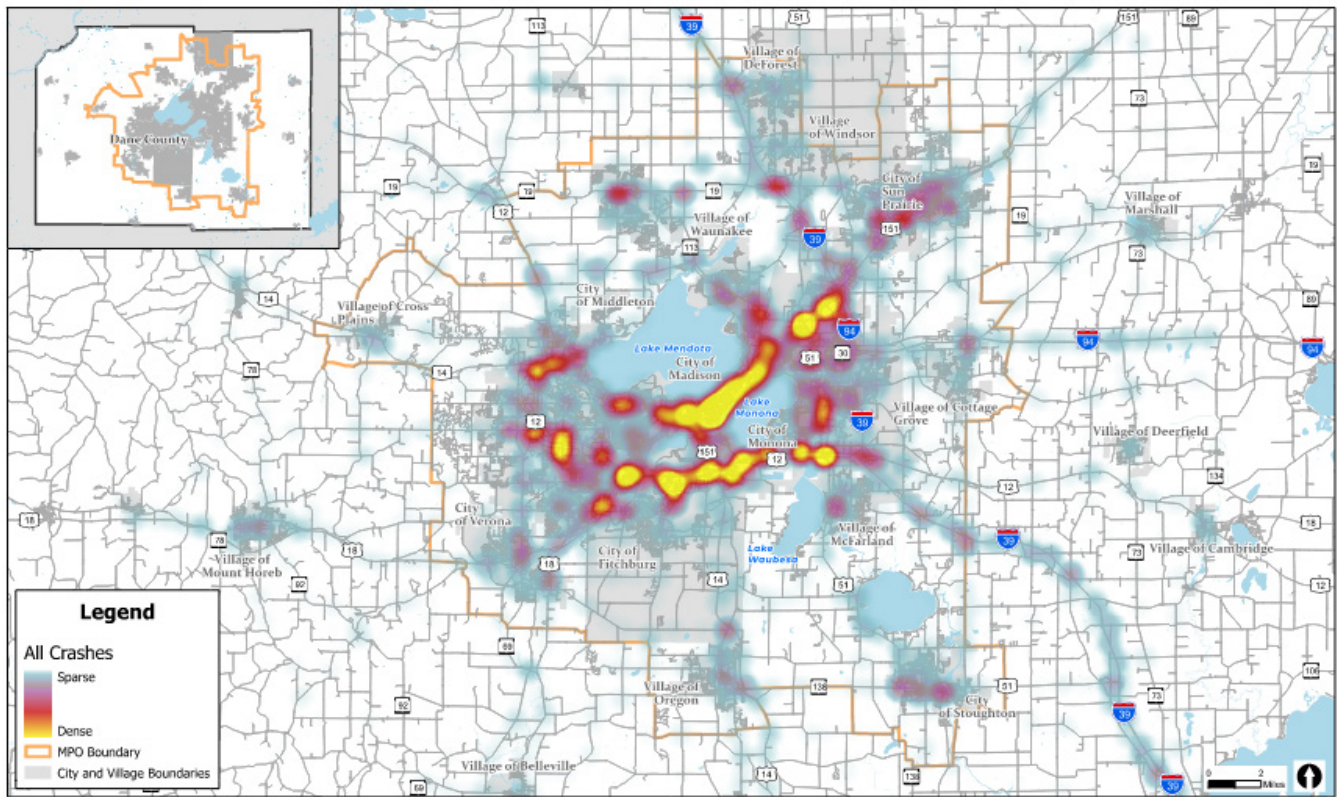
**Table 1. KABCO Injury Scale**

Severe (more injurious)	Non-Severe (less injurious)
<b>K</b> - involves a fatal injury	<b>B</b> - non- incapacitating injury
<b>A</b> - incapacitating injury (serious injury)	<b>C</b> - possible injury
	<b>O</b> - no injury or a property damage-only (PDO) crash

2 Crash Data is from 2017-2020 and included crashes on within 50 ft of a public road and excluded interstate, parking lots, and deer collisions.

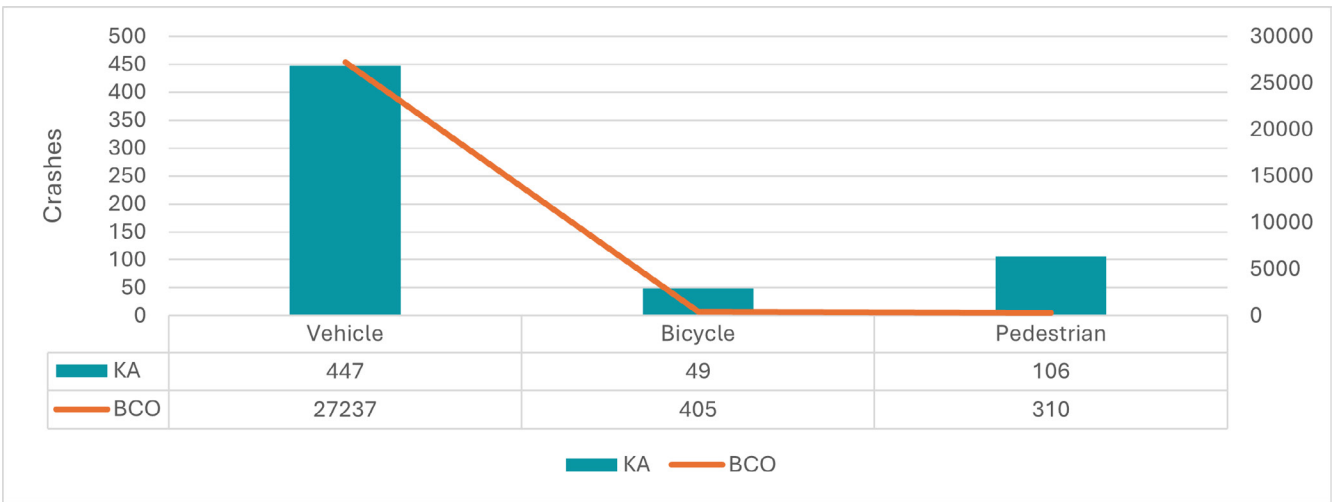
Figure 3 shows the crash density of fatal and serious injury crashes occurring between 2017 and 2020 within the region. The vast majority of serious injury crashes are concentrated around the state’s trunk highway system.

Figure 3 Crash Heat Map (2017-2020)



As seen in Figure 4, the majority of crashes involved automobiles; however, pedestrians were involved in a disproportionate number of serious (KA) crashes compared to vehicle and bicyclists.

Figure 4 Crash Severity by Mode





The Regional Safety Action Plan acknowledges the importance of evaluating behavioral emphasis areas as a part of the safety analysis. Between 2017 and 2020, the region experienced more than 200 fatal and serious injury crashes as a result of impaired driving.<sup>4</sup>

This means that crashes involving impaired drivers were at higher risk of fatal and serious injuries compared to other emphasis areas like distracted or inattentive driving, speeding, and age-related crashes. Building on the efforts by the Dane County Traffic Safety Commission, continued assessment by the region of these emphasis areas is necessary to identify potential opportunities for process improvements within the region. The Dane County Traffic Safety Commission has made great strides to prevent fatal and serious injury crashes by implementing focused enforcement to combat driving while impaired by alcohol or drugs, slowing down for students and more!

Table 2 identifies the specific crash profiles categorized by mode. For each profile, the number of crashes that match the described high-risk theme is provided. Crash severities are summarized at three levels:

- All crashes
- FI – Injury/fatal (FI) crashes, which excludes property damage only
- KSI – Severe injury/fatal (KSI) crashes, which includes KABCO injury level K or A only

### Impaired Driving

25% of all fatal and serious (KA) injury crashes involved impaired driving.

### Teens and Older (65+) Drivers

28% of all fatal and serious (KA) injury crashes involved teen or older drivers.

### Speeding

26% of all fatal and serious (KA) injury crashes involving speed.

### Distracted Driving

15% of fatal and serious (KA) injury crashes involved distracted driving.

### Occupant Protection

19% of fatal and serious (KA) injury crashes involved unbelted passengers and/or no helmet or safety gear (bike and motorcycles).

<sup>4</sup>Behavioral crash facts are from Dane County Traffic Safety Commission and includes crashes from 2017-2020 and includes crashes from the entire Dane County area.



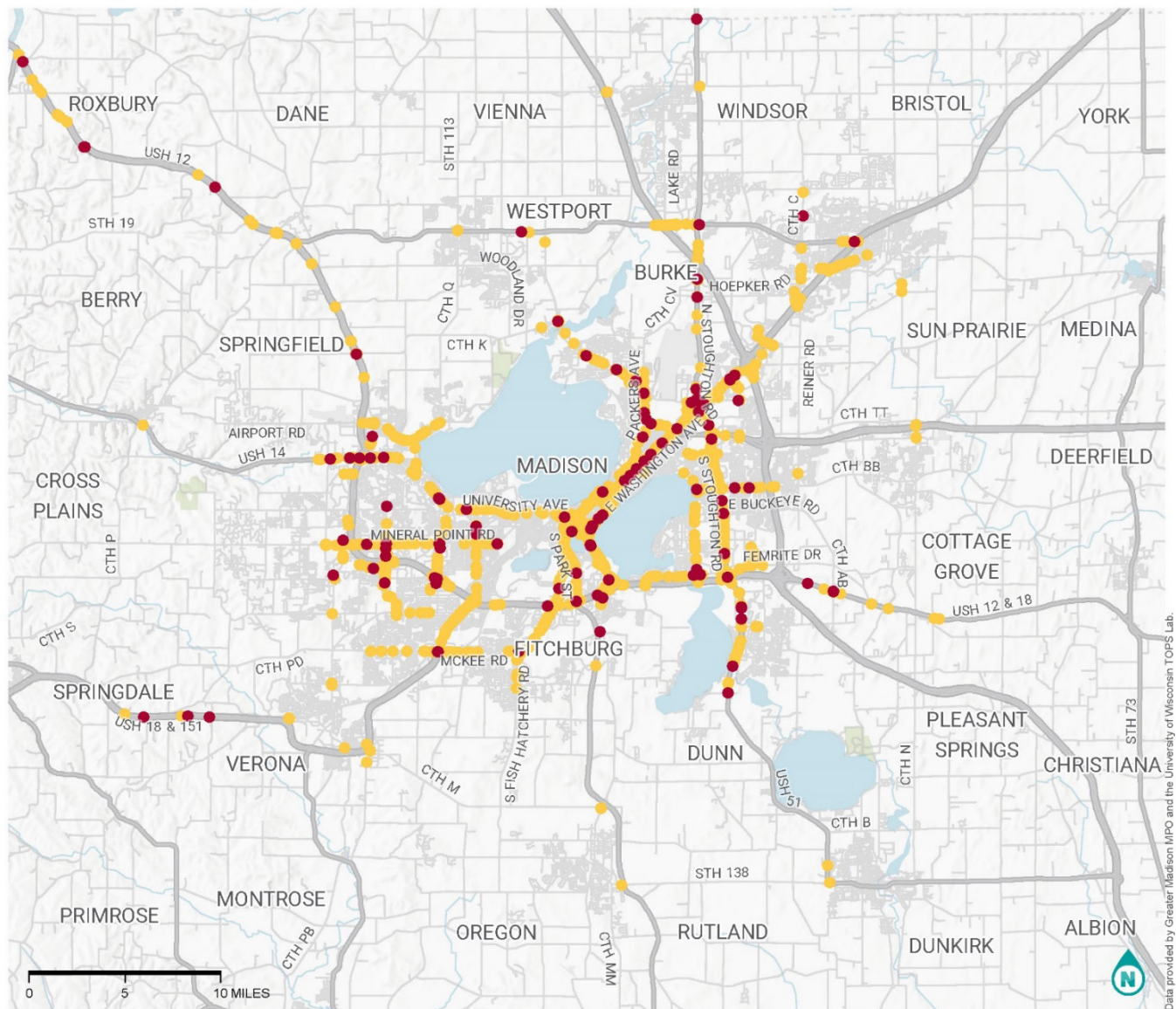
**Table 2 Summary of Crash Profiles**

Profile Name	Mode	Number of FI Crashes	% of Modal FI Crashes	Number of KSI Crashes	% of Modal KSI Crashes
<b>Vehicles</b>					
Multi-Lane Arterials	Vehicle	2,049	32%	121	27%
Turning Vehicles at Signalized Intersections	Vehicle	775	12%	47	11%
Roadway Departure in Rural Areas	Vehicle	293	5%	53	12%
<b>Bicyclists</b>					
Signalized Intersections	Bicycle	76	18%	8	16%
Uncontrolled Intersections	Bicycle	25	6%	8	16%
Roads Without Bike Infrastructure	Bicycle	91	22%	12	25%
Multi-Lane Arterials	Bicycle	65	16%	12	24%
<b>Pedestrians</b>					
Commercial Areas	Pedestrian	136	35%	29	27%
Multi-Lane Arterials	Pedestrian	84	21%	31	29%
Pedestrian Hit & Run Crashes	Pedestrian	41	10%	16	17%
Unmarked Mid-Block Crossings	Pedestrian	66	17%	12	11%

The concentrations of crashes that match each crash profile were mapped for the region. Figure 5 illustrates the concentration of severe and fatal (KA crashes only) crashes along with lesser injury crashes (BC crashes only) for crash profile 1 – Vehicles on Multi-Lane Arterials. Additional maps of the crash profiles can be viewed in Appendix 3 and can also be viewed at the [Regional Safety Action Plan Online Map](#). The maps are accompanied by a table to highlight the number and type of crashes contributing to each profile.



Figure 5 Crash Profile Map - Vehicles on Multi-Lane Arterials



VEHICLES ON MULTI-LANE ARTERIALS

This profile analyzes crashes that resulted in a severe or fatal injury on multi-lane arterials with posted speed limits of 30 mph or greater.

CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

## Developing a High Injury Network

A High Injury Network (HIN) is a collection of street segments that have the highest concentrations of serious crashes. A HIN not only highlights the most crash-prone segments of corridors within a study area, but it also facilitates the selection of project limits for projects to address the safety issues on those highlighted segments. This moves beyond typical crash history and allows for a better understanding of the types of roadways and intersections in the region where users are the most at risk. This allows the MPO to proactively work to minimize the occurrence and severity of crashes into the future.

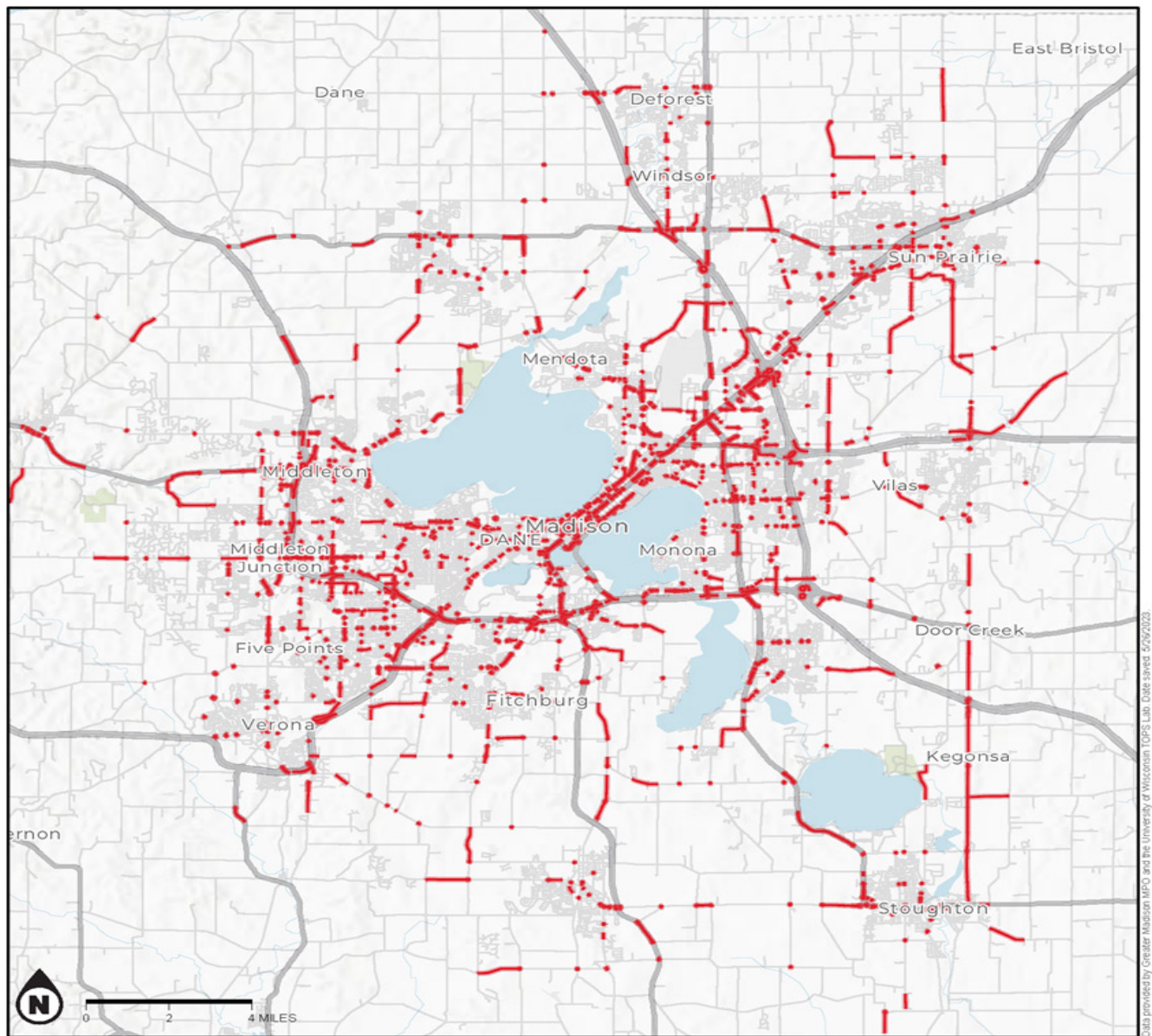
A HIN is developed by calculating the density of severe crashes along all streets in a study area and selecting minimum crash density thresholds for including segments in the HIN. The goal is to select a threshold for each mode of transportation that results in neither too large nor too small a portion of the network being highlighted. In cases where there are too few severe crashes or the crashes are too spread out, even the lowest reasonable threshold won't result in any segments highlighted. For a more detailed description of the methodology in the development of the MPO's HIN by the Traffic Operations and Safety Laboratory (TOPS Lab) at the University of Madison Wisconsin, see **Appendix 4**.

## OVERVIEW OF RESULTS

The HIN analysis included K, A, B, and C crashes between a four-year period from 2017 through 2020. While a 5-year time period is traditionally used in collision analyses, the Wisconsin crash reporting format changed at the beginning of 2017, therefore increasing the complexity of collision reporting with data organized in multiple formats. The analysis primarily considered arterial and collector roadways with some additional roadways and intersections. The analysis was based not only on the number of observed serious crashes, but also considered identifying long-term trends in collision patterns that account for regression to the mean. See **Appendix 4** for HIN Considerations and further detail on the statistical analysis and potential future use.

Figure 6 illustrates the combined results of the segments and intersection HIN analysis for the region. See **Appendix 5** for HIN maps for each community within the region. The HIN can also be viewed at the [Regional Safety Action Plan Online Map](#).

Figure 6 Madison MPO High Injury Network (2017-2020)



## MADISON MPO HIN (2017 - 2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK  
— HIN Roadway or  
Intersection Segment



## Equity Analysis

### WHAT DOES EQUITY MEAN?

According to the U.S. Department of Transportation, equity in transportation seeks fairness in mobility and accessibility to meet the needs of all community members. A central goal of transportation is to facilitate social and economic opportunities by providing equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally disadvantaged.

### DOES EQUITY APPLY TO THE GREATER MADISON MPO?

Yes. The MPO is committed to understanding how the transportation network relates to areas of equity concern around the region to distribute investments fairly, taking into consideration current inequities and that environmental justice populations are not disproportionately impacted. As a part of the regional Transportation Improvement Plan (TIP) from 2021-2025 and 2022-2026, the MPO defined two tiers of Environmental Justice (EJ) Areas based on the concentration of low-income and racial/ethnic minority residents. The score-based effort used US Census data to identify concentrations of minority (non-White and/or Hispanic) and low-income residents (those with household incomes below 150% of the federal poverty level). These two metrics formed the basis of a Minority Score and Poverty Score, additional adjustments to scores were considered based on local understanding such as high proportions of students eligible for free and reduced-price school lunches. The second tier of EJ Areas considers slightly lower concentrations of vulnerable populations than the Tier 1 EJ Areas.

### GREATER MADISON MPO EQUITY ANALYSIS

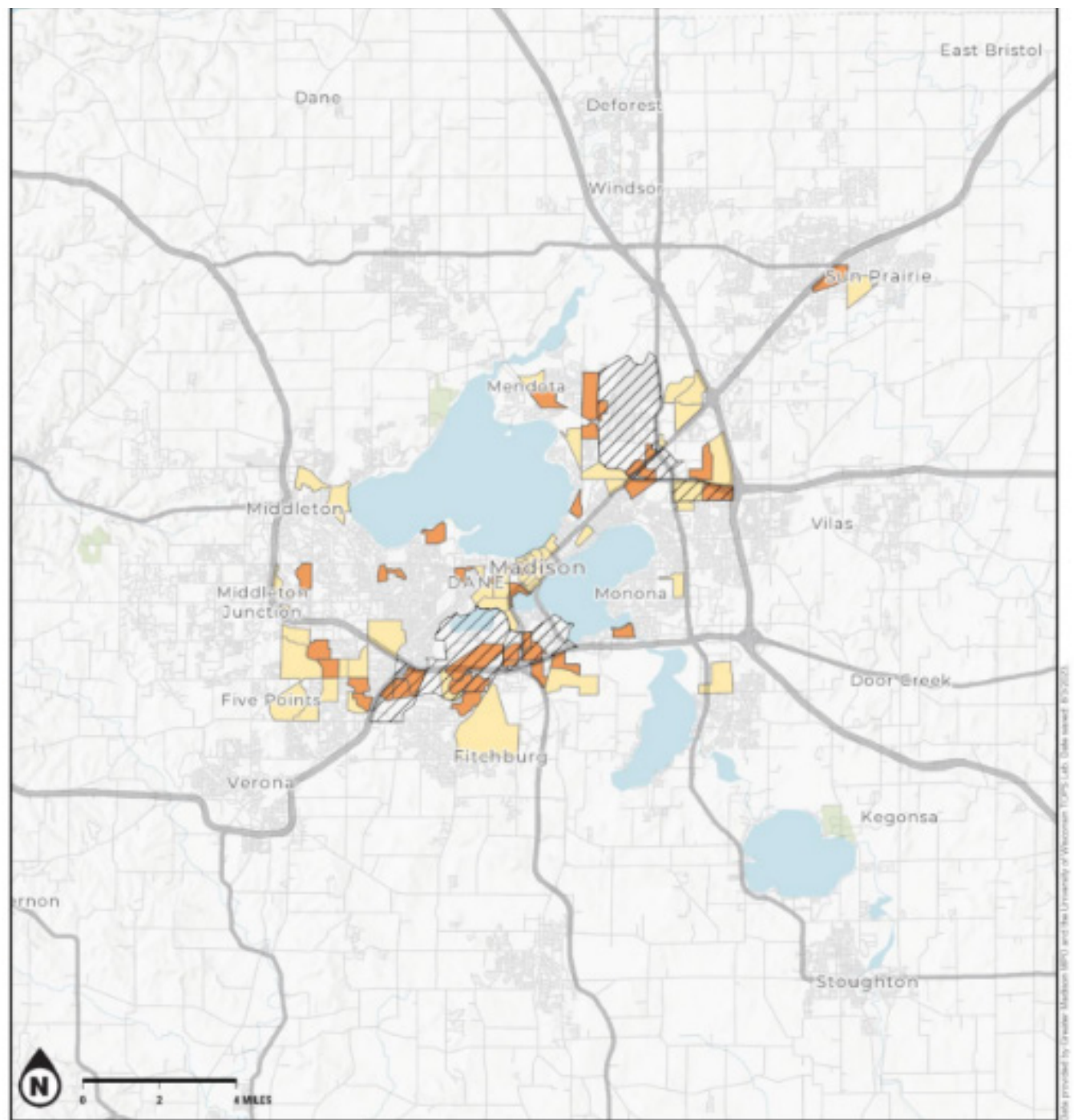
Expanding on the MPO's defined Tier 1 and Tier 2 Environmental Justice Areas, the MPO also reviewed the Climate and Economic Justice Screening Tool (CEJST) from the US Council on Environmental Quality. The tool identifies Census tracts that are considered underserved based on environmental, climate, socioeconomic, or other burdens. Categories include health, housing, legacy pollution, transportation, workforce development, and others.

The MPO Tier 1 and Tier 2 EJ Areas were mapped alongside the CEJST areas in Figure 7. This map illustrates the variation between the regional EJ Tiers and the federal designation. For example, the CEJST Tool designates the entire Dane County Regional Airport as an underserved area, while the MPO EJ Tiers highlight the residential areas on the perimeter of the airport that more accurately reflect where burdened residents live. Another difference is around the University of Wisconsin Arboretum. The federal designation includes the entire Census tract, while the Madison MPO designation highlights only the most affected block groups where burdened residents live.

The MPO EJ Tiers were used in the prioritization methodology to identify potential locations where future roadway safety investments could be made.

For more information on the Equity Analysis methodology, see **Appendix 6**.

Figure 7 Comparison of USDOT and Greater Madison MPO Equity Areas



ENVIRONMENTAL JUSTICE  
AREA COMPARISON

MADISON MPO  
SAFETY ACTION PLAN

ENVIRONMENTAL JUSTICE AREA

- Climate and Economic Justice Screening Tool - Disadvantaged Area
- Madison MPO - Tier 1
- Madison MPO - Tier 2



## Chapter 6: Taking Action – Toolkit

The Greater Madison MPO identified the following countermeasures for consideration to address the region's high-risk themes (See crash profiles for more information). The countermeasures include data-driven and proven safety strategies from [Federal Highway Administration \(FHWA\) Proven Safety Countermeasures](#), [FHWA Step Guide for Improving Pedestrian Safety at Uncontrolled Intersections](#), and [Crash Modification Factor Clearinghouse](#). The Technical Coordinating Committee and communities within the region also provided input on potential countermeasures they would consider; therefore, consolidating the list to a focused toolkit. Each countermeasure addresses at least one of the high-risk themes identified in the crash profiles. See the following chapter (Chapter 10 Road to Zero) for the systemic implementation of these countermeasures.



## Engineering Countermeasures

The MPO and the communities within the region may consider the following engineering design countermeasures to address high priority locations identified within this Plan.

Countermeasure	Crash Modification Factor	Estimated Cost <sup>5</sup>
Speed safety cameras	54% crash reduction	\$50,000 to \$125,000
Reduce lane widths	Not available	\$2,000 to \$25,000
Road diets (lane configuration)	47% crash reduction	\$15,000 to \$125,000
Backplates with retroreflective borders	15% crash reduction	\$4,000
Dedicated left/right turn lanes	14-26% crash reduction	\$250,000
Roundabout/Mini Roundabout	61% crash reduction	\$100,000 to \$500,000
Flashing yellow arrow	37% crash reduction	\$50,000 to \$100,000
Wider Edge Lines	18% crash reduction	\$9,000
Enhanced Delineation for Horizontal Curves	28% crash reduction	\$5,000
Longitudinal Rumble Strips and Stripes on Two-Lane Roads	Not available	Not available
Median Barriers	44-56% crash reduction	\$25,000 to \$50,000
Corridor Access Management	25-31% crash reduction	\$360,000 per mile
Leading pedestrian interval Turning restrictions	60% crash reduction	\$25,000 per intersection
Parking restriction on crosswalk approach	20% crash reduction	\$15,000
Advance “yield here” sign and stop bar	25% crash reduction	\$300 per sign
Remove sightline obstructions	38% crash reduction	Not available
Lighting	42% crash reduction	\$4,800 per streetlight
Rectangular Rapid Flashing Beacons	47% crash reduction	\$50,000
Pedestrian Hybrid Beacons	69% crash reduction	\$100,000 to \$170,000
Retroreflective strips on stop sign posts	Not available	\$2,500
Bicycle lanes/boulevard	30-49% crash reduction	\$5,000 per mile
Bike lanes with buffer/separated from traffic	53% crash reduction	\$500,000 per mile
Paved Shoulder	30-49% crash reduction	\$5,000 per mile
Sidewalks	40% crash reduction	\$80,000 per mile
Medians and Pedestrian Refuge Islands in Urban and Suburban Areas	46-56% crash reduction	\$25,000 to \$50,000 per mile
Appropriate speeds	26% decrease in fatalities	Not available
In-street pedestrian crossing sign	Not available	\$240 per sign
Curb extension	30% crash reduction	\$10,000 to \$20,000
Pedestrian countdown timers	9% crash reduction	\$12,000
No Right Turn on Red	Not available	\$100,000
Variable speed limits	34% crash reduction	Not available
Dynamic speed feedback sign	5-7% crash reduction	\$30,000 per location

<sup>5</sup>The costs in the table are planning level estimates provided by agencies prior to 2023. Costs will vary by year, vendor, location, size, etc.

## Non-Engineering Countermeasures

Not all approaches to improving roadway safety in the Greater Madison MPO include physical improvements or changes to the system. A theme for non-engineering countermeasures to improving roadway safety is ongoing diligence on the part of the MPO and its partners in having a comprehensive approach to roadway safety.

### CORRIDOR STUDIES

A corridor study is a planning project that characterizes and evaluates roadway conditions, whether existing or for the future. The goal of the study is to provide recommendations for infrastructure projects that address concerns highlighted by the study. Once the corridor study is adopted, implementation can begin which can lead to funding for the project, additional studies and/or policy updates.

### SPEED MANAGEMENT

Speed management programs provide a framework on how to create a safe environment for all road users across a specific road network. A speed management program aims to address factors that influence speeding. This includes user behavior, roadway design, land use, traffic behavior and law enforcement. Along with identifying issues, countermeasures are to be identified that are effective in management speeds. The outcome of developing the plan is to evaluate the effectiveness of the solutions and thus reduce speeding-related fatalities and injuries as well as increasing the safety experience for all road users.

### LIGHTING MANAGEMENT

Lighting management programs create a plan to strategically place lighting infrastructure for the benefit of all road users. Lighting management plans particularly emphasize resolving pedestrian safety issues as this vulnerable user group is at significant risk during the night. Once implemented, lighting infrastructure will provide a visual environment that is safe for road users during hours of darkness. Lighting management plans may also consider and investigate using new lighting technology to enhance the safety of the network.

### NEW EDUCATION CAMPAIGN

A new education campaign helps connect people to their transportation options which leads to the promotion of safety and wellbeing of all users. Key services of a campaign may include social media, graphic design, web development and in person engagement as well as research and innovation to involve stakeholders in the deployment of a new or existing program, policy, or infrastructure improvement.

### ROAD SAFETY AUDIT

A Road Safety Audit estimates and reports road safety issues as well as identifying specific improvements for all road users. A team independent from the project conducts the audit. Road safety audits may specifically focus on vehicles, pedestrians, motorcycles or a specific combination of users. Understanding of road user capabilities and limitations is essential for a road safety audit. These audits can be utilized at any stage in the project development process. Road safety audits can be used for projects ranging from minor to major in size.

### PEDESTRIAN EDUCATION/VISIBILITY



The visibility of pedestrians can be affected by obstructed views, lighting conditions, and parked vehicles. The safety issues that arise from this can be resolved with pedestrian education campaigns that engage the community in the planning process to make the transportation network more visible and safer to all road users. Brochures, news articles, social media announcements and videos, and poster materials can be developed to educate road users about pedestrian safety to improve user experience.





### SAFE ROUTES STUDIES

“Safe Routes to School” has been a longstanding program that uses a variety of education, engineering and enforcement strategies that help make routes safer for children to walk and bicycle to school and encouragement strategies to entice more children to walk and bike. The MPO and their partners identified improving walking and biking access to schools and to park facilities as a priority.

Based on public input and analysis of crash data, a Safe Routes to School is highlighted as a potential countermeasure to consider in this Plan that will improve walking and biking access near schools. However, additional infrastructure improvements and other strategies may be necessary to improve walking and biking access to schools and parks. Therefore, a specific study of access to these facilities is recommended in partnership with schools within the MPO and local parks departments to ensure a comprehensive approach to safer walking and biking access.

### HIN CORRIDOR ENHANCED ENFORCEMENT

The high injury network (HIN) developed through this Plan’s in-depth analysis of crash data provides an opportunity to focus not only on engineering countermeasures, but also non-engineering countermeasures, such as focused law enforcement and traffic monitoring efforts.

### IMPROVING TRAFFIC RECORDS AND COORDINATION

Capturing accurate and thorough crash data is a constant challenge experienced nationally. Although accuracy can be improved by automating crash data with the use of cameras that capture images of violations or crashes; the use of cameras are not widely used or accepted. The coding and classification of crash data can also be assessed and improved by making training programs available for law enforcement to report on bicycle and pedestrian crash as well as racial demographics. This can also include the expansion of data attributes to identify more information about the given crash. Near miss incidents are another major gap in our understanding of roadside safety. Near miss reporting can improve the understanding of how the circumstances of a crash can arise. Continued coordination is also necessary with law enforcement, EMS and hospital records.



## DEMONSTRATION PROJECTS

Demonstration projects use materials to show what future changes may look like to public agencies, partners, and the public. They are designed for the short-term, and the cost of a demonstration project is significantly less than a final infrastructure project. Demonstration projects are useful as stakeholders can evaluate the project before making any permanent infrastructure changes. These projects also inspire action, help gather data and increase public engagement. See [MnDOT Demonstration Project Implementation Guide, 2019](#) for more information on best practices for a quick-build approach.

### Traffic calming demonstration

- Traffic calming demonstration projects may include using temporary materials to create a median island, traffic circle, or a parklet to reduce or slow traffic in the short-term. The goal of the demonstration may also aim to increase the safety of active transportation methods. To evaluate the effectiveness, surveys, interviews, and counts may also be recorded during the process.

### Bike lanes/ trail demo

- Using temporary materials, bike lanes can be added by creating a buffer to prevent cars from utilizing the given demo project's location. Materials may include paint, tape, bike lane-related signs, or flexible posts for separated bike lanes. Existing lanes for automobiles can also be reduced to make space for a bike lane demonstration project. Bike lane demos are generally low-cost.

### Midblock crosswalk installation demo

- Midblock crosswalks can be demonstrated using spray paint. The crosswalk markings may be applied to a project location where pedestrian traffic is anticipated and encouraged. The goal of the project is to see if the crosswalk will reduce potential conflicts between motorists and pedestrians. The effectiveness of a midblock crosswalk demo can be evaluated by driver stop/yield compliance, interviews, and surveys.

# Chapter 7: Road to Zero

## GROWING SAFETY CULTURE WITHIN THE GREATER MADISON MPO

Foundational change has already begun within the Greater Madison MPO. The MPO staff and the communities within the region, as well as Dane County, continue to identify opportunities to address transportation safety and change the safety culture within the region. Several local agencies have completed or are in the process of developing their own Vision Zero plans. The cultural actions listed below in Table 3 Cultural Actions will support the region’s goal to achieve zero traffic deaths and severe injuries on streets within the MPO by 2040. Further, they will serve as the groundwork for the implementation of countermeasures identified through this Safety Action Plan’s prioritization process.

Table 3 Cultural Actions

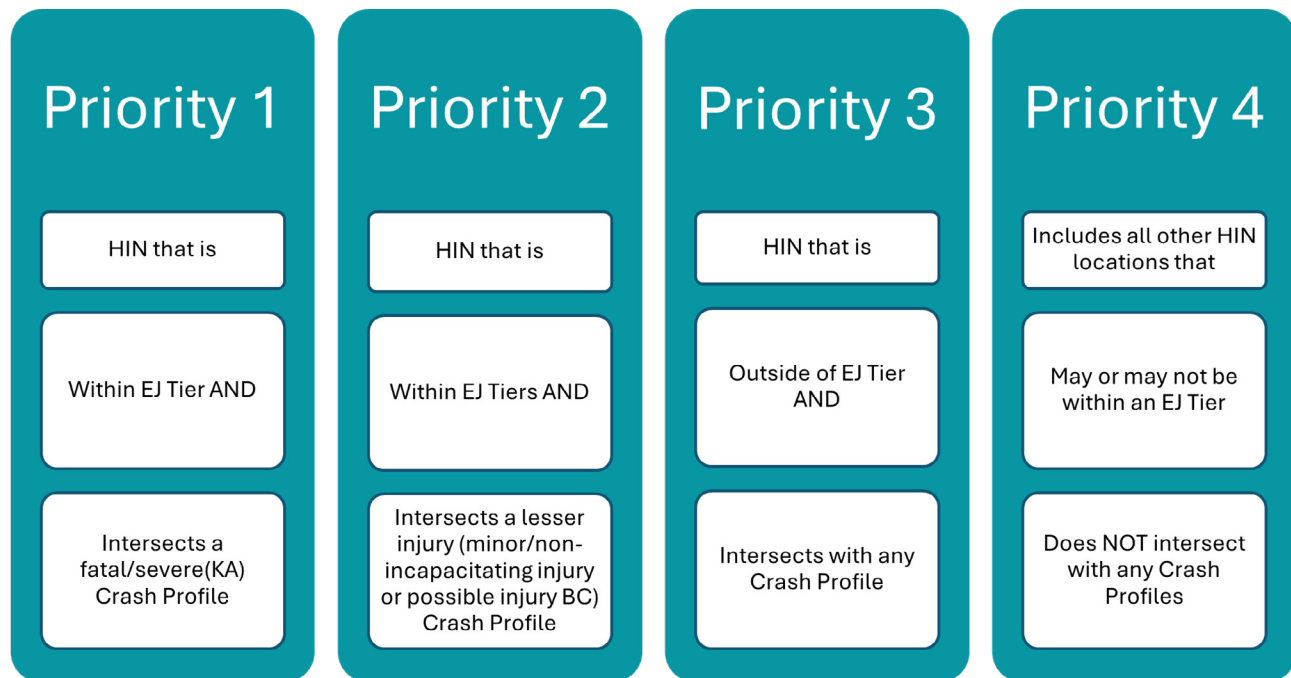
#	Action	Timeline
CA.1	MPO Policy Board adopts this Safety Action and vision zero goal.	Q2 2024
CA.2	Share the RSAP analysis including GIS data to all local agencies within the region for local analysis and identification of countermeasures to implement.	Q4 2024
CA.3	Continue to engage the MPO’s Technical Coordinating Committee serving as the Regional Safety Action Plan planning structure to monitor progress.	Continuous
CA.4	Maintain opensource data and resources such as Streetlight data so local agencies can continue to request and conduct analysis.	Continuous
CA.5	Coordinate joint regional applications to address regional roadway safety priorities to include an application for the Safe Streets and Roads for All Grant Program	Q4 2026
CA.6	Identify scoring considerations to incorporate the prioritization from this RSAP (and other local vision zero plans) as a consideration to programs and project funding sources such as HSIP and STBG.	Q1 2025
CA.7	Incorporate the HIN, Crash Profiles, and results of the prioritization results into future plan updates.	Continuous
CA.8	Continue to evaluate emphasis areas and behavioral crash data into future RSAP updates	Continuous

## PRIORITIZATION - HOW TO USE THE DATA EVALUATION

Using the eleven Crash Profiles and EJ Tiers identified in Chapter 8 – Data Evaluation, a subset of the HIN was prioritized for safety investments. The prioritization will help the MPO and the local agencies to focus safety interventions on a subset of high-crash corridors and intersections. These priority investment locations consist of locations along the HIN with particularly high crash densities and either intersect or fall within the following:

**Crash Profiles** – Crash profiles highlight specific conditions that account for a large share of fatal and serious injury crashes in the MPO region. The crash profiles are mapped as a crash point by mode. Eleven crash profiles were identified.

**Equity Tiers** – Environmental Justice (EJ) tiers were defined by the MPO as a part of the data evaluation. They are based on the concentrations of low-income and racial/ethnic minority residents. To prioritize the investment locations, the following criteria were used:



The criteria were applied to each of the eleven crash profiles resulting in eleven prioritization maps. Each map includes Priority 1-3, which intersects crash profiles, unlike priority 4. Priority 1 is considered the highest priority to be addressed first, however the MPO and local agencies will evaluate implementation based on available funding, community requests, and programmed

adjacent investments. Some locations lower on the priority scale may be elevated due to the proximity of existing planned and programed infrastructure improvements.

Figure 8 - 18 identifies the priority investment locations for each of the Crash Profiles. To see a more detailed map of the region, see the [Regional Safety Action Plan Online Map](#).

Figure 8 - Prioritization - Profile 1 Multi-lane Arterials (Vehicle)

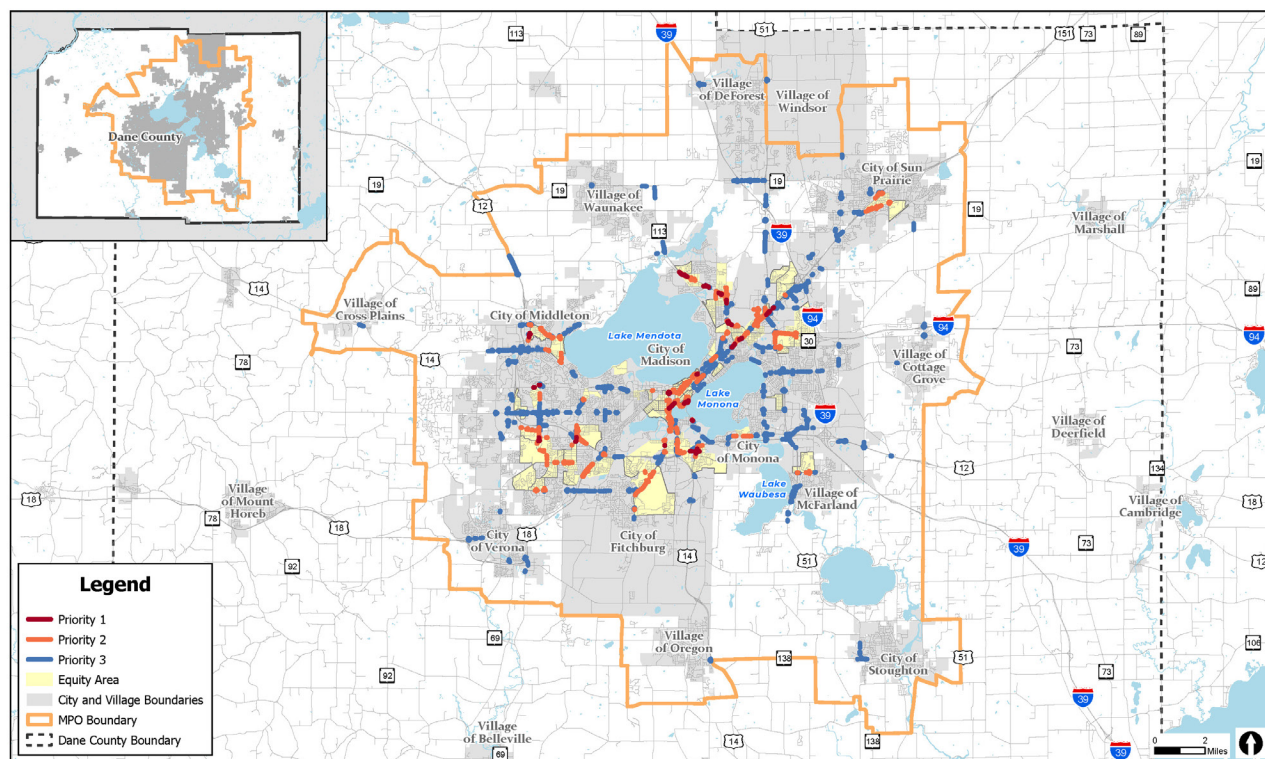


Figure 9 - Prioritization - Profile 2 Turning Vehicles at Signalized Intersections (Vehicle)

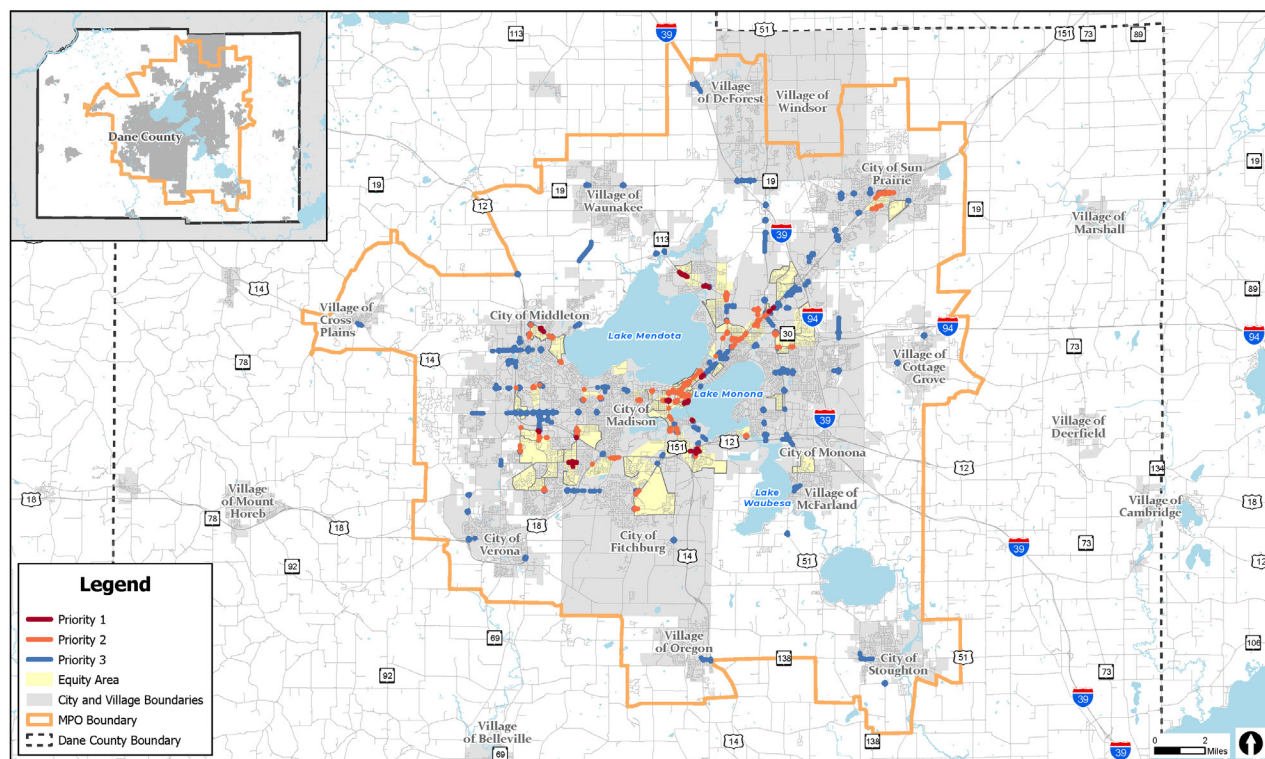




Figure 10 Prioritization - Profile 3 Roadway Departure in Rural Areas (Vehicle)

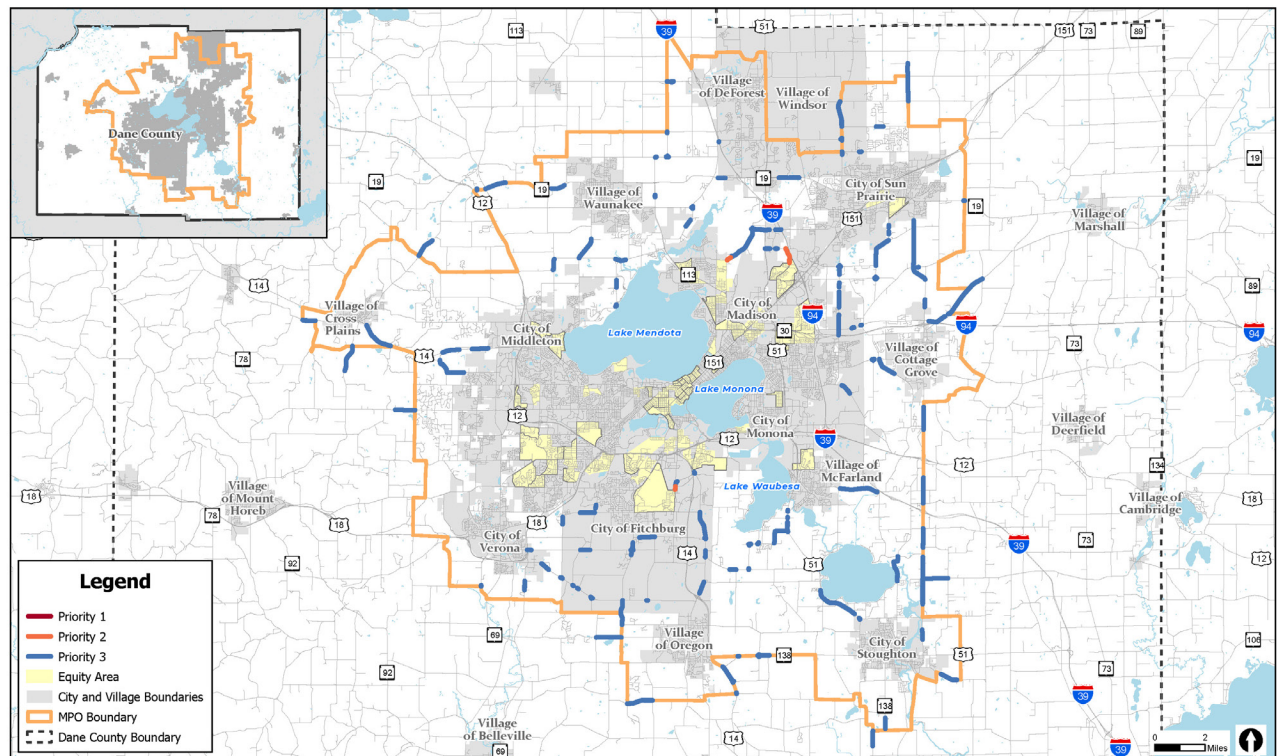


Figure 11 - Prioritization - Profile 4 Signalized Intersections (Bicycle)

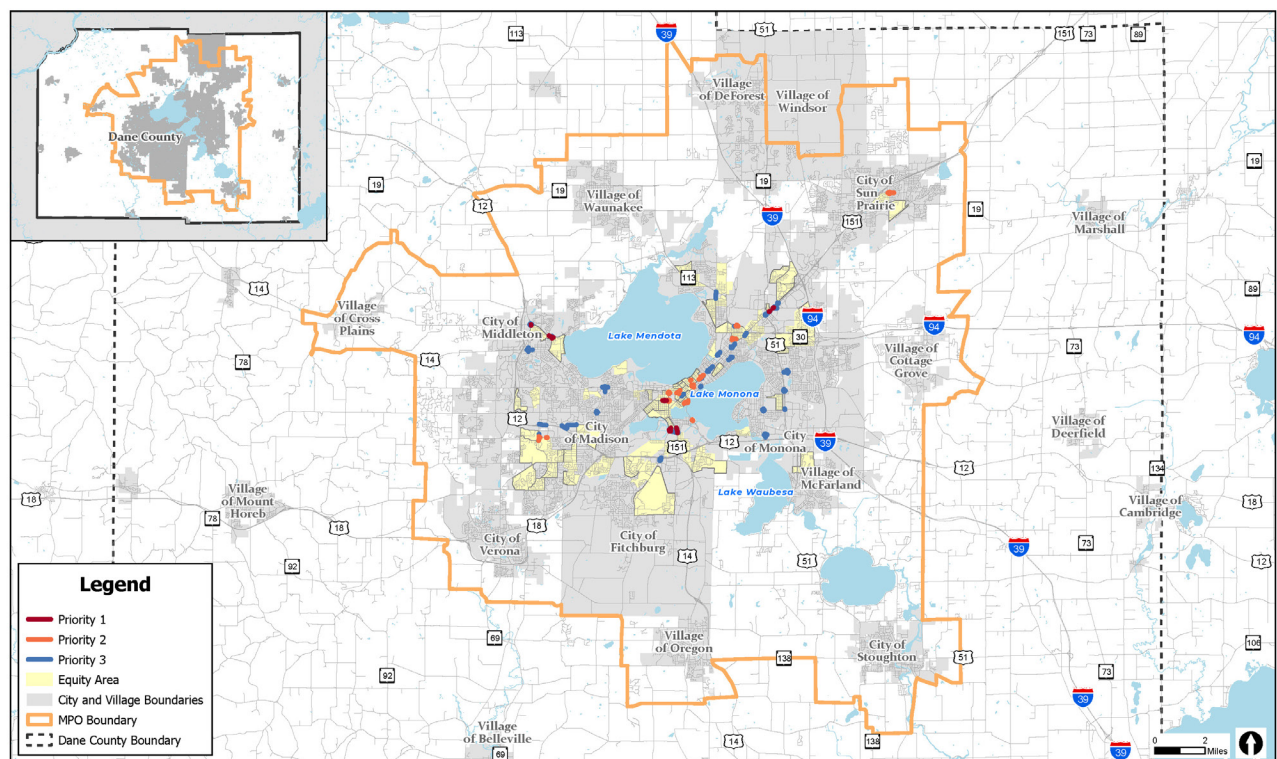


Figure 12 - Prioritization - Profile 5 Uncontrolled Intersections (Bicycle)

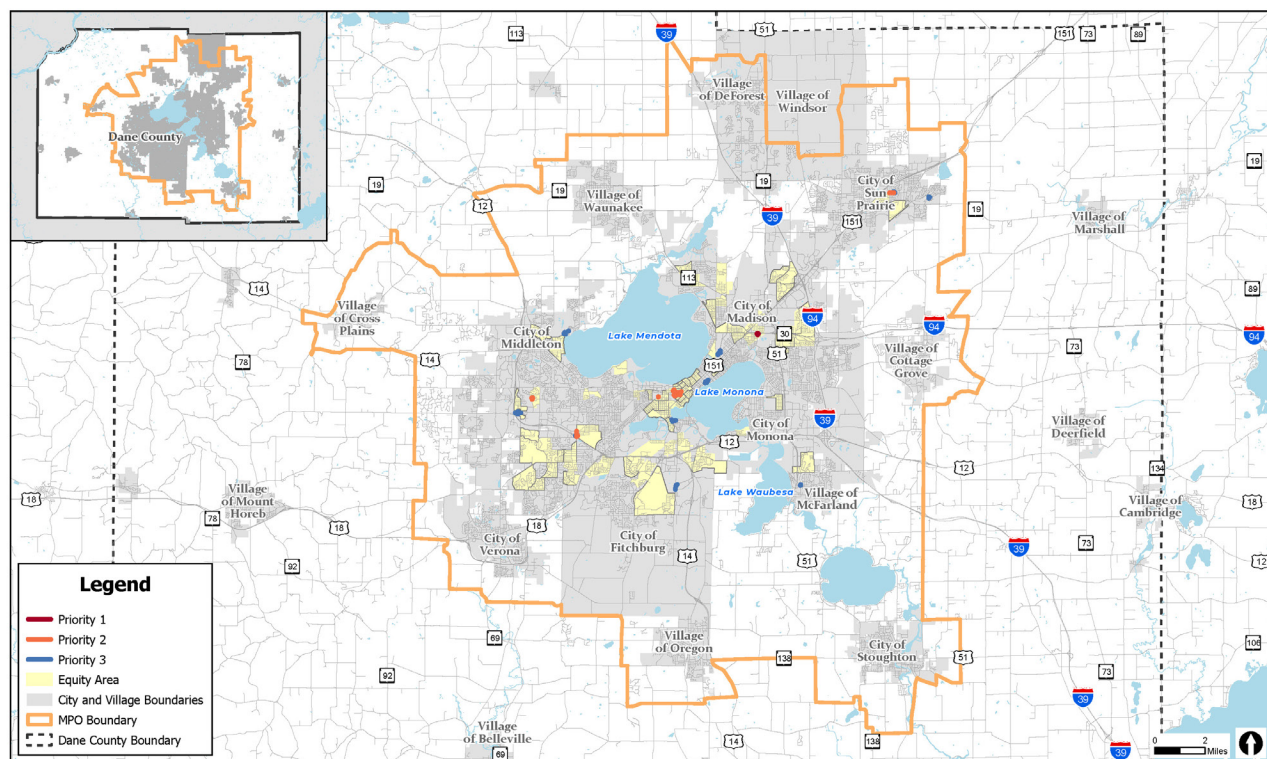


Figure 13 - Prioritization - Profile 6 Roads Without Bike Infrastructure (Bicycle)

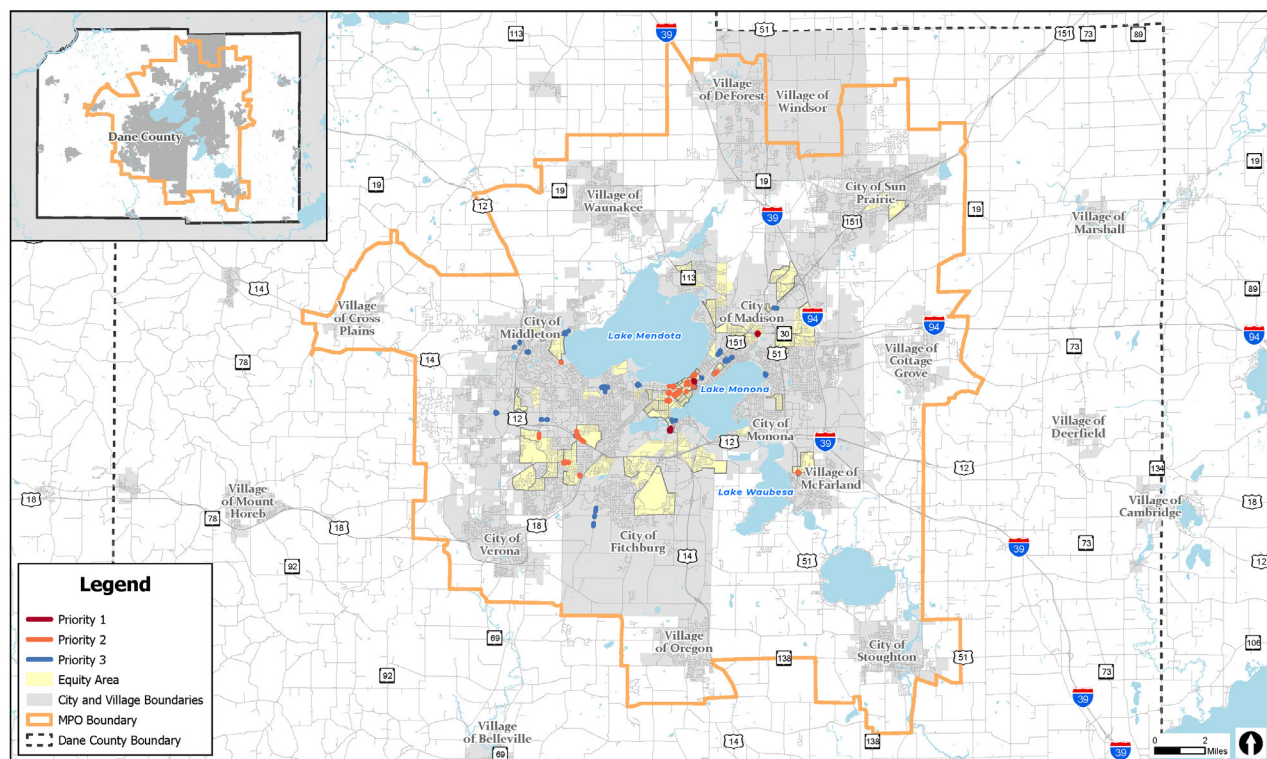




Figure 14 - Prioritization - Profile 7 Multi-Lane Arterials (Bicycle)

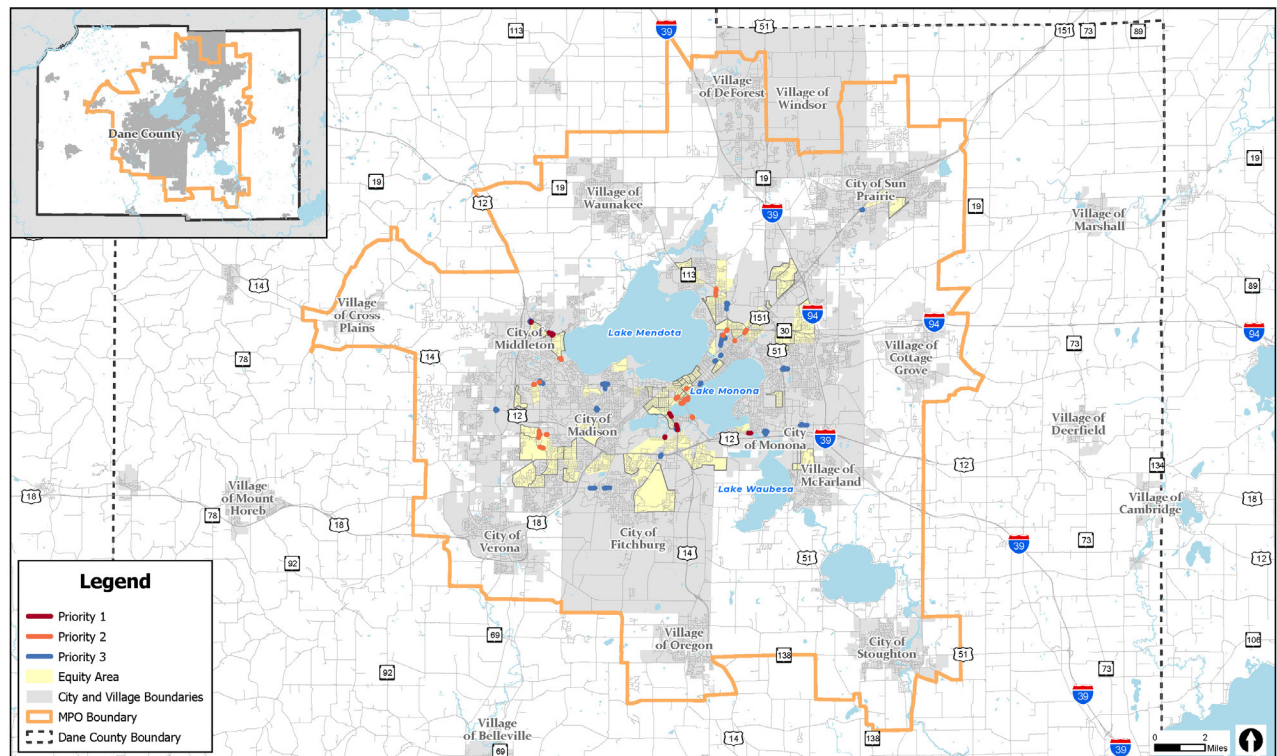


Figure 15 - Prioritization - Profile 8 Commercial Areas (Pedestrian)

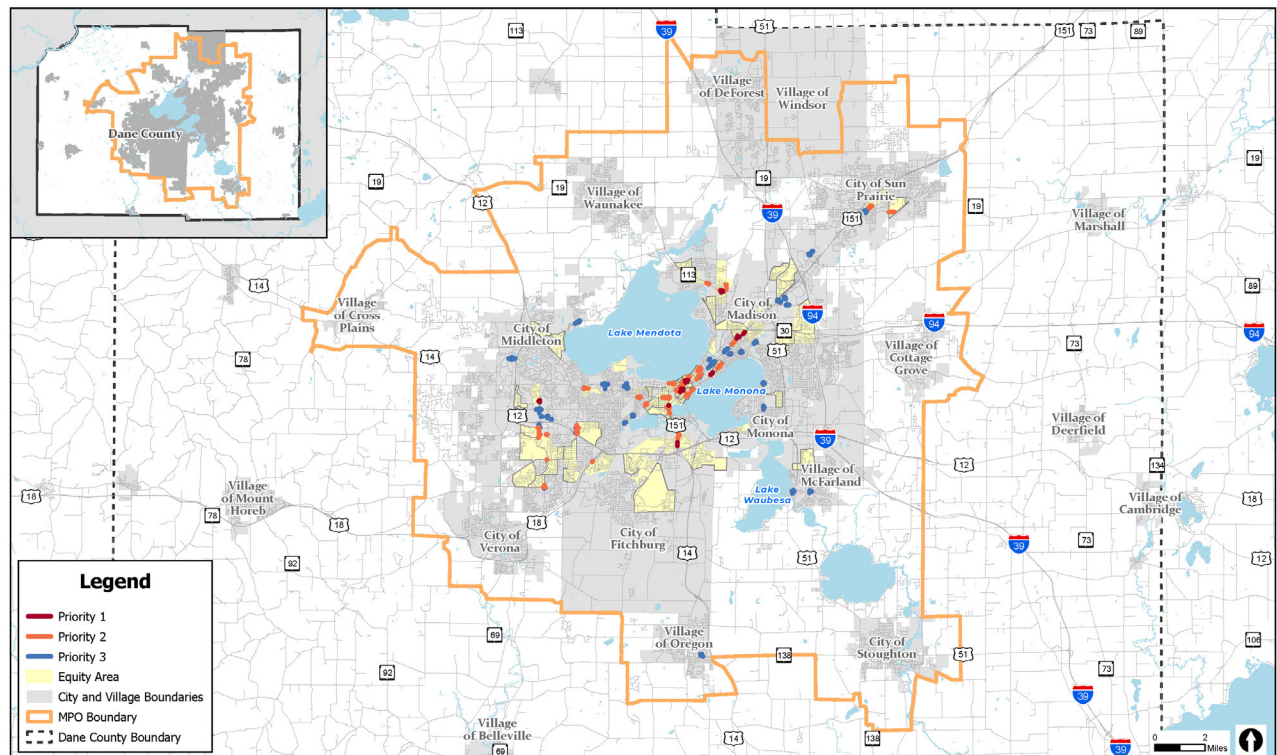


Figure 16 - Prioritization - Profile 9 Multi-Lane Arterials (Pedestrian)

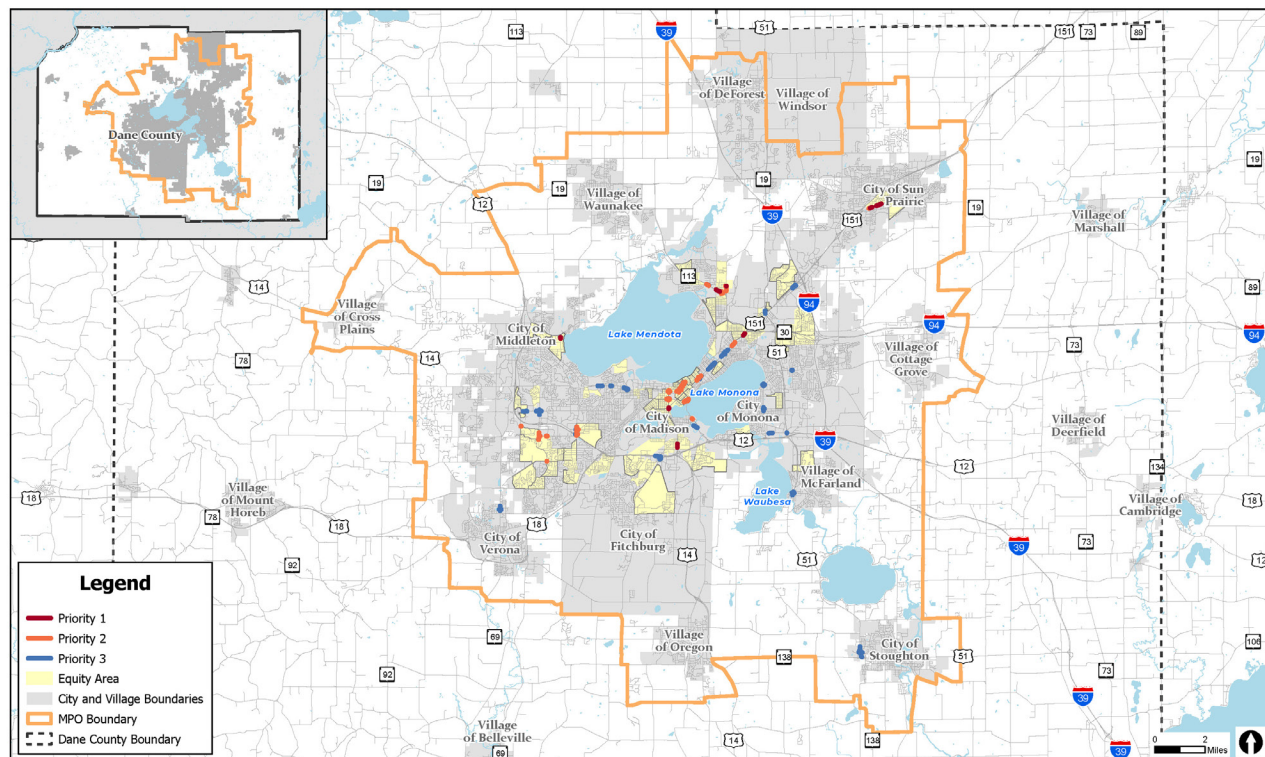


Figure 17 - Prioritization – Profile 10 Pedestrian Hit &amp; Run Crashes (Pedestrian)

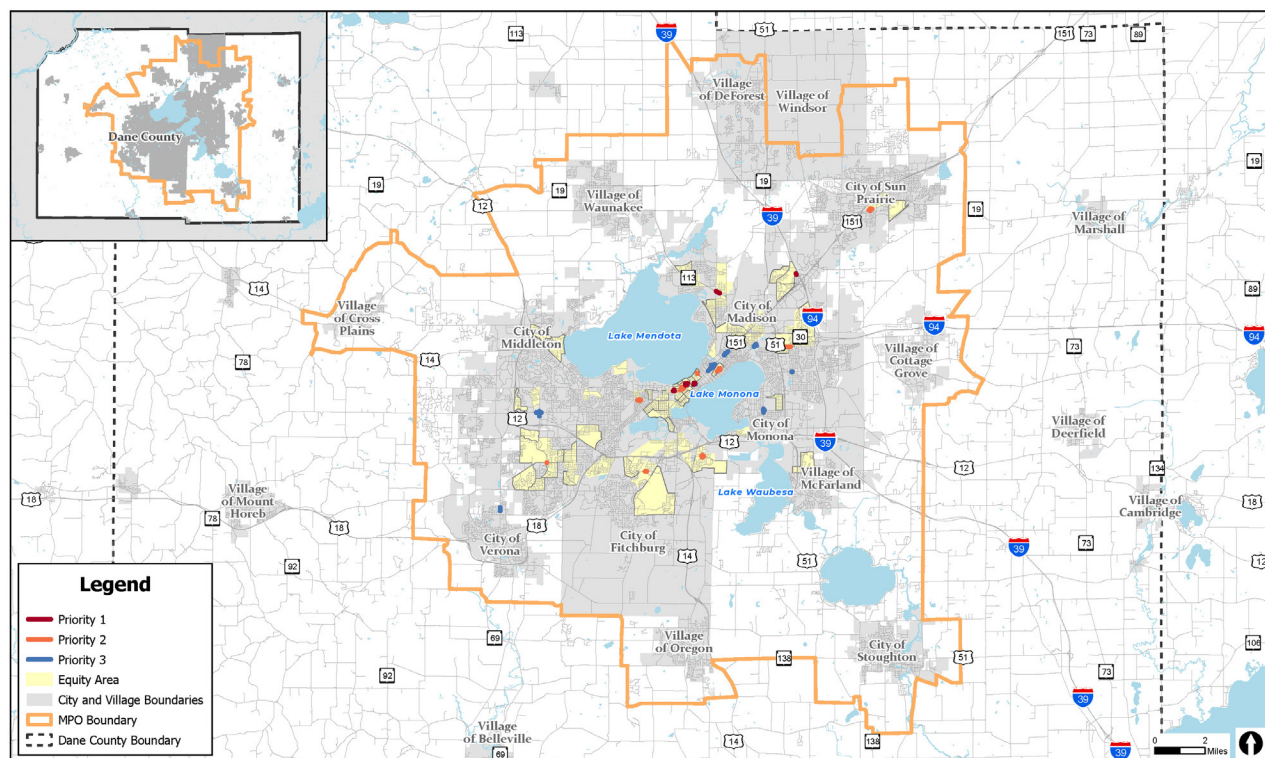
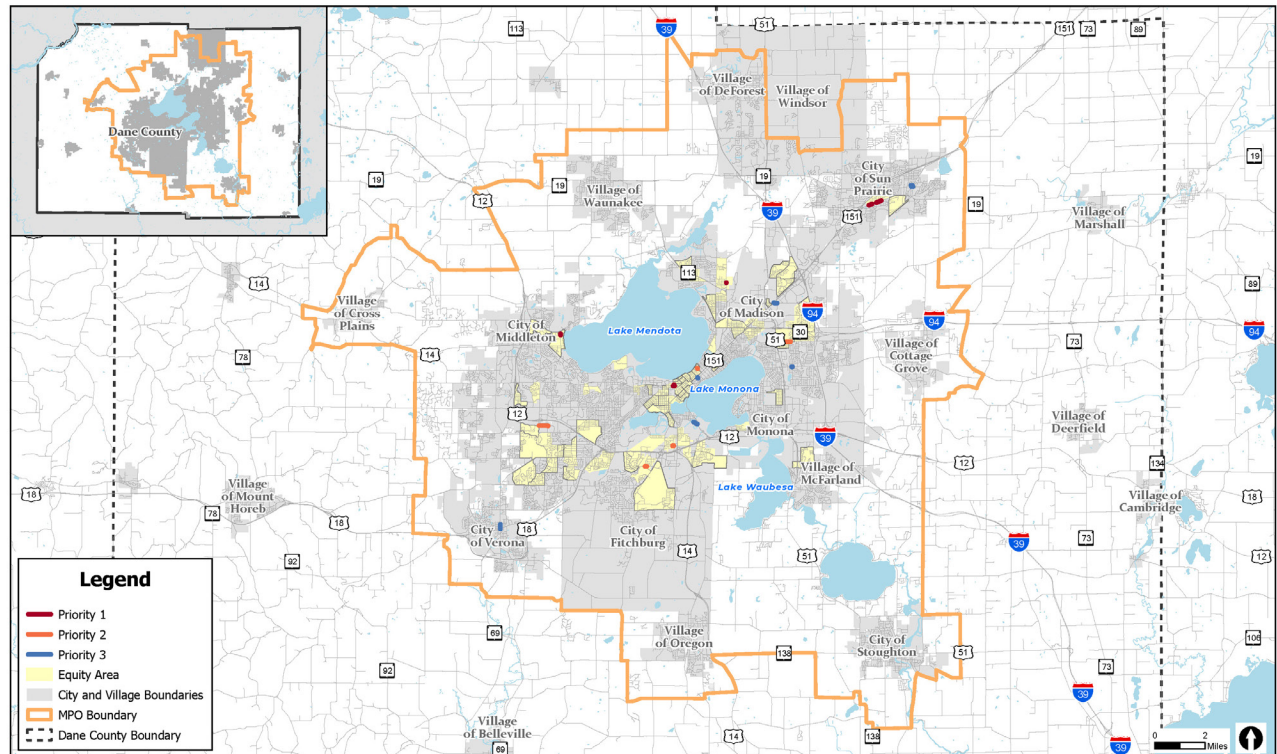








Figure 18 - Prioritization - Profile 11 Unmarked Mid-Block Crossings (Pedestrian)



Based on the results, the proven engineering and non-engineering countermeasures listed in Chapter 9 – Taking Action – Toolkit were identified as potential safety improvements to consider when evaluating priority locations and addressing the Crash Profiles. The potential countermeasures were

based on FHWA's Proven Safety Countermeasures and reviewed with the Greater Madison MPO staff, WisDOT and local agency partners. See Table 4 Potential Countermeasures by Crash Profile Table 4 for list of potential countermeasures to address the eleven crash profiles.

**Table 4 Potential Countermeasures by Crash Profile**

Crash Profile	Mode	Engineering Countermeasure	Non-Engineering Countermeasure
<b>Multi-Lane Arterials</b>			
Severe or fatal crashes that occurred on multi-lane arterials with posted speed limits of 30 mph or greater		<ul style="list-style-type: none"> <li>• Speed safety cameras</li> <li>• Variable speed limits</li> <li>• Reduce lane widths</li> <li>• Road Diets (Lane Configuration)</li> </ul>	<ul style="list-style-type: none"> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Road safety audit</li> <li>• Traffic calming demonstration</li> </ul>
<b>Turning Vehicles at Signalized Intersections</b>			
Severe or fatal crashes that resulted in an injury from a front-to-side vehicle crash at a signalized intersection		<ul style="list-style-type: none"> <li>• Backplates with retroreflective borders</li> <li>• Dedicated left/right turn lanes</li> <li>• Roundabout/Mini Roundabout</li> <li>• Flashing yellow arrow</li> </ul>	<ul style="list-style-type: none"> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Road safety audit</li> <li>• Traffic calming demonstration</li> </ul>
<b>Roadway Departure in Rural Areas</b>			
Severe or fatal crashes that occurred on an undivided rural road with posted speed limits of at least 35 mph. Injuries related from the vehicle leaving the roadway and striking another object or otherwise losing control.		<ul style="list-style-type: none"> <li>• Wider Edge Lines</li> <li>• Enhanced Delineation for Horizontal Curves</li> <li>• Longitudinal Rumble Strips and Stripes on Two-Lane Roads</li> <li>• Median Barriers</li> </ul>	<ul style="list-style-type: none"> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Road safety audit</li> </ul>
<b>Signalized Intersections</b>			
Severe or fatal crashes that occurred when a vehicle struck a bicyclist at a signalized intersection.		<ul style="list-style-type: none"> <li>• Backplates with retroreflective borders</li> <li>• Corridor Access Management</li> <li>• Leading pedestrian interval</li> <li>• Turning restrictions</li> <li>• Parking restriction on crosswalk approach</li> <li>• Advance "yield here" sign and stop bar</li> <li>• Flashing yellow arrow</li> <li>• Remove sightline obstructions</li> </ul>	<ul style="list-style-type: none"> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• Traffic calming demonstration</li> <li>• Bike lanes/trail demo</li> </ul>

Crash Profile	Mode	Engineering Countermeasure	Non-Engineering Countermeasure
<b>Uncontrolled Intersections</b> Severe or fatal crashes that occurred when a vehicle struck a bicyclist at an intersection with no traffic control devices.		<ul style="list-style-type: none"> <li>• Lighting</li> <li>• Rectangular Rapid Flashing Beacons</li> <li>• Pedestrian Hybrid Beacons</li> <li>• Road Diets (Reconfiguration)</li> <li>• Parking restriction on crosswalk approach</li> <li>• Advance “yield here” sign and stop bar</li> <li>• Remove sightline obstructions</li> <li>• Retroreflective strips on stop sign posts</li> </ul>	<ul style="list-style-type: none"> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• Traffic calming demonstration</li> <li>• Bike lanes/trail demo</li> </ul>
<b>Roads Without Bike Infrastructure</b> Severe or fatal crashes that occurred while the bicyclist was riding along an urban city street that had no bicycle infrastructure.		<ul style="list-style-type: none"> <li>• Bicycle lanes/boulevard</li> <li>• Bike lanes with buffer/separated from traffic</li> <li>• Paved Shoulder</li> </ul>	<ul style="list-style-type: none"> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• Traffic calming demonstration</li> <li>• Bike lanes/trail demonstration</li> </ul>
<b>Multi-Lane Arterials</b> Severe or fatal crashes that occurred on multi-lane arterials with posted speed limits of at least 30 mph.		<ul style="list-style-type: none"> <li>• Bicycle lanes/boulevard</li> <li>• Bike lanes with buffer/separated from traffic</li> <li>• Paved Shoulder</li> </ul>	<ul style="list-style-type: none"> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• Traffic calming demonstration</li> <li>• Bike lanes/trail demonstration</li> </ul>
<b>Commercial Areas</b> Severe or fatal crashes that occurred while pedestrians were crossing the road in marked crosswalks in areas with commercial land uses.		<ul style="list-style-type: none"> <li>• Lighting</li> <li>• Leading pedestrian interval</li> <li>• Rectangular Rapid Flashing Beacons</li> <li>• Pedestrian Hybrid Beacons</li> <li>• Road Diets (Reconfiguration)</li> <li>• Sidewalks</li> <li>• Medians and Pedestrian Refuge Islands in Urban and Suburban Areas</li> <li>• Appropriate Speeds</li> <li>• Speed safety cameras</li> <li>• Sidewalks</li> <li>• Parking restriction on crosswalk approach</li> <li>• Advance “yield here” sign and stop bar</li> <li>• In-street pedestrian crossing sign</li> <li>• Curb extension</li> <li>• Pedestrian countdown timers</li> <li>• Remove sightline obstructions</li> <li>• No Right Turn on Red</li> <li>• Dynamic speed feedback sign</li> </ul>	<ul style="list-style-type: none"> <li>• Pedestrian Education/Visibility</li> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• RRFB for vulnerable road users (demonstration)</li> <li>• Midblock crosswalk installation demonstration</li> <li>• Traffic calming demonstration</li> </ul>




Crash Profile	Mode	Engineering Countermeasure	Non-Engineering Countermeasure
<b>Multi-Lane Arterials</b> Severe or fatal crashes that occurred on multi-lane arterials with posted speed limits of 30 mph or greater and annual average daily traffic of at least 6,000 vehicles.		<ul style="list-style-type: none"> <li>• Lighting</li> <li>• Leading pedestrian interval</li> <li>• Pedestrian Hybrid Beacons</li> <li>• Road Diets (Reconfiguration)</li> <li>• Medians and Pedestrian Refuge Islands in Urban and Suburban Areas</li> <li>• Curb extensions</li> <li>• Parking restriction on crosswalk approach</li> <li>• Advance “yield here” sign and stop bar</li> <li>• Appropriate speeds</li> <li>• Speed safety cameras</li> <li>• Sidewalks</li> </ul>	<ul style="list-style-type: none"> <li>• Pedestrian Education/Visibility</li> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• Midblock crosswalk installation demonstration</li> <li>• Traffic calming demonstration</li> </ul>
<b>Pedestrian Hit &amp; Run Crashes</b> Severe or fatal crashes that occurred in urban settings at night.		<ul style="list-style-type: none"> <li>• Lighting</li> <li>• Appropriate speeds</li> <li>• Pedestrian countdown timers</li> <li>• Retroreflective strips on stop sign posts</li> </ul>	<ul style="list-style-type: none"> <li>• Pedestrian Education/Visibility</li> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• RRFB for vulnerable road users (demonstration)</li> <li>• Midblock crosswalk installation demonstration</li> <li>• Traffic calming demonstration</li> </ul>
<b>Unmarked Mid-Block Crossings</b> Severe or fatal crashes that occurred in urban settings where the pedestrian is struck while crossing the road outside a marked crosswalk, not at an intersection.		<ul style="list-style-type: none"> <li>• Lighting</li> <li>• Rectangular Rapid Flashing Beacons</li> <li>• Road Diets (Reconfiguration)</li> <li>• Sidewalks</li> <li>• Medians and Pedestrian Refuge Islands in Urban and Suburban Areas</li> <li>• Appropriate speeds</li> <li>• Curb extension</li> <li>• Parking restriction on crosswalk approach</li> <li>• Advance “yield here” sign and stop bar</li> </ul>	<ul style="list-style-type: none"> <li>• Pedestrian Education/Visibility</li> <li>• Corridor studies</li> <li>• Speed management</li> <li>• Lighting management</li> <li>• Safe Routes to School</li> <li>• New education campaign</li> <li>• Road safety audit</li> <li>• RRFB for vulnerable road users (demonstration)</li> <li>• Midblock crosswalk installation demonstration</li> <li>• Traffic calming demonstration</li> </ul>

Figure 19 identifies Priority 4 locations, which do not correspond to any crash profiles. These locations should be considered as priority locations for review and potential project development and implementation based on funding availability.





## SYSTEMIC IMPLEMENTATION

Specific action items are necessary to implement the Safety Action Plan. Table 5 includes specific actions to address the goals and objectives listed in Chapter 5 – Roadway Safety in the Greater Madison MPO. The table also includes entities identified to champion implementation of the action, key partner organizations, a timeline to track implementation, and relative level of investment expected to implement each action item.

**Goal:** References the MPO's three goals described in Chapter 5 – Roadway Safety in the Greater Madison MPO.

**Timeframe:**

Short term: 0-2 years

Midterm: 2-5 years

Long term: 5+ years

**Investment Level Key:**

\$ - Includes efforts with low investment in agency labor such as changes to existing practices and approaches to collaboration with partner organizations.

\$\$ - While not involving a physical project, may require significant investment of agency labor and partner organization involvement.

\$\$\$ - Capital investment in a physical project, likely including significant agency labor investment as well.

**Table 5. Implementation Actions**

#	Goal	Action	Responsibility	Key Partners	Timeline	Investment Level
G1.1	1	Support the work of the Dane County Traffic Safety Commission and Local Safety Initiatives	MPO	Dane County Traffic Safety Commission and Local Agencies	Ongoing	\$
G1.2	1	Develop and Implement Regional Active Transportation Plan	MPO	Local Agencies	Ongoing	\$\$
G1.3	1	Implement lighting at appropriate pedestrian and bicycle crash profiles with Priority 1	Local Agencies	WisDOT	Long term	\$\$\$
G1.4	1	Develop a regional Complete Streets design standard	MPO	Local Agencies, WisDOT	Short term	\$
G2.1	2	Implement Safe Routes Studies at appropriate pedestrian and bicycle crash profiles with Priority 1	Local Agencies and MPO	School Districts	Midterm	\$\$
G2.2	2	Enhance Traffic Enforcement in Priority 1 Locations along with those identified by the Dane County Traffic Safety Commission	Law Enforcement Agencies and Dane County Traffic Safety Commission	MPO, WisDOT	Ongoing (Review of results after 5 years)	\$\$
G2.3	2	Analyze safety data and program projects to address priority 1 locations	Local Agencies and WisDOT	MPO	Long term	\$\$\$
G2.4	2	Identify potential speed management techniques to be employed regionally as a best practice	MPO	Local Agencies and Law Enforcement Agencies	Short term	\$
G2.5	2	Identify Traffic Calming Best Practices for new development and reconstructs	MPO and Local Agencies	Law Enforcement Agencies	Short term	\$

#	Goal	Action	Responsibility	Key Partners	Timeline	Investment Level
G2.6	2	Enhance training for law enforcement and emergency service personnel responsible for crash reporting	Law Enforcement Agencies	MPO, Dane County Traffic Safety Commission, WisDOT	Midterm	\$\$
G2.7	2	Develop Distracted Driving -Targeted Education	Regional Police Department	MPO, Dane County Traffic Safety Commission, WisDOT	Short term	\$\$
G2.8	2	Partner with youth organizations to create anti-distraction messaging campaigns	MPO	Dane County Traffic Safety Commission, Local agencies, Community Organization, School Districts	Short term	\$\$
G2.9	2	Establish program and procedures to continue a fatality review considering the potential for a roadway safety audit after fatal or serious injury crashes; include establishing crash victim advocates	MPO	Dane County Traffic Safety Commission	Short term	\$
G2.10	2	Coordinate a joint regional effort to assess the use of speed safety cameras (currently prohibited by state law). Cities like Milwaukee continue to advocate for their use as a cost-effective strategy to address reckless driving.	Local Agencies	Dane County Traffic Safety Commission and Law Enforcement Agencies	Long term	\$\$
G3.1	3	Develop planning and promoting safety around regional transit services	MPO	Local Agencies and Transit Services	Short term	\$
G3.2	3	Conduct targeted engagement with traditionally underrepresented before implementing infrastructure projects	Local agencies	Community Groups, Dane County Traffic Safety Commission, WisDOT, MPO	Long term	\$

## MEASURING AND REPORTING PROGRESS

### Plan Leadership and Structure

The MPO assumes leadership of the Regional Safety Action Plan and the vision to achieve zero traffic deaths and severe injuries on streets within the MPO by 2040. This Regional Safety Action Plan was adopted by the Policy Board on June 5, 2024. As a part of this Regional Safety Action Plan, the MPO has identified the TCC to carry out steering the data evaluation and review of the components of the Regional Safety Action Plan. The TCC continues to meet monthly to advise on regional transportation planning matters to include implementation and evaluation of the actions listed in this Regional Safety Action Plan. The MPO will also continue to collaborate with the Dane County Traffic Safety Commission in support of their data-driven safety priorities and coordinate with implementation.

### Evaluation

The MPO will provide yearly reports once the previous year's crash data is available to evaluate progress toward the Regional Safety Action Plan's vision to zero traffic deaths and severe injuries. The MPO will also evaluate progress to the actions listed in this Regional Safety Action Plan. The yearly reporting will be a part of the federally required performance measures (as detailed in the MPO's [Performance Measures Dashboard](#)). The safety performance measures include a 5-year rolling average:

- Number of serious injuries
- Number of non-motorized fatalities and serious injuries
- Number of crash fatalities

From the date of adoption, the MPO will revise the goals, objectives, and actions or fully update the Regional Safety Action Plan every five years to ensure the data evaluation is up to date and reflects the evolving policies, programs and projects within the region.



# State of Practice and Policy Review

## Introduction

The State of Practice Review examines the current transportation safety planning practices employed by other Metropolitan Planning Organizations (MPOs) and local, county, and regional governments within Wisconsin. It also explores best practices from both domestic and international sources, reviewing essential guidance and resource documents that focus on planning and designing safe infrastructure with consideration of vulnerable road users.

## What are MPOs doing?

### Hillsborough TPO Safe Streets Now Vision Zero Action Plan (2017)

- Through the Hillsborough Safe Streets Vision Zero initiative, the Hillsborough TPO is dedicated to creating safer streets for all road users and working towards the elimination of traffic fatalities and serious injury. The comprehensive safety approach focused on engineering solutions, education, enforcement, and collaboration to achieve meaningful improvements in road safety.
- The Vision Zero Action Plan and its High Injury Network (HIN) identified twenty high-crash corridors. Out of these corridors, eight (8) were funded for additional evaluation and feasibility analysis of proposed countermeasures. This effort was conducted in collaboration with Hillsborough County, and resulted in identifying proven, low-cost, high-impact safety designs that could be implemented quickly to accelerate safety benefits.
- Since the adoption of the Vision Zero Action Plan, the TPO has taken many implementation steps in road safety programming. The implementation of the Hillsborough TPO's safety values are reflected in their Speed Management Action Plan, Safe Access to Parks Study, and Tampa School Transportation Safety Study. The Speed Management Action Plan was particularly recognized for its implementation of strategies to address the significant number of severe crashes occurring on high-speed multi-lane limited-access arterials that intersect the urbanized area. Such strategies included developing traffic operations recommendations, establishing local street design guidelines, collaboration with law enforcement and stakeholders, policy review and recommendations, and more.

## ONE MESSAGE, MANY VOICES

I

**GOAL 1:** **INCREASE AWARENESS OF VISION ZERO TO INFLUENCE SAFER BEHAVIORS ON OUR ROADWAYS**

The success of Vision Zero relies on the support and backing of a broad base of people, from the public up to elected officials. There are different methods of reaching different audiences. These different methods should be identified, along with the appropriate messages for each audience. Social media will be a useful tool in reaching a broad range of people, but in-person outreach also needs to occur across the county to develop Vision Zero champions throughout.

### How We Measure Success...



### Knoxville TPO Regional Roadway Safety Action Plan (2023)

- The Knoxville Regional TPO adopted its Regional Roadway Safety Action Plan in June 2023. The Action Plan aims to eliminate roadway injuries and fatalities, improve transportation safety for all users through well-coordinated and robust planning efforts, and provide technical assistance and data analysis to prioritize safety evaluations in underrepresented areas.
- The Plan centers on a 'Safe System Approach' which recognizes that humans will make mistakes and are vulnerable parties in crashes, and therefore focuses on creating a redundant and safe system that reduces the risk and severity of crashes. The City of Knoxville and Knox County were key partners in the process, and given the region's diverse land use context that encompassed both rural and urban contexts, crash profiles reflected both land use scenarios. This allowed for highlighting key crash causes that collectively targeted the areas with the highest concentrations of severe crashes. Crash profiles included roadway departure crashes in rural areas, and motor vehicle crashes in commercial areas.
- The Plan also identified specific corridors and intersections within the region where investments should be prioritized. Preliminary countermeasures and concepts were developed at these locations to guide future funding.
- Knoxville's Plan also developed a predictive analysis methodology that will allow a more proactive approach to crash data analysis in the region.
- With the adoption of its Regional Safety Action Plan, the TPO submitted for the 2023 SS4A Implementation Grant that was due on July 10, 2023.



#### CRASH PROFILE 1: MOTOR VEHICLE CRASHES IN COMMERCIAL AREAS

This factor analyzes crashes that resulted in death or serious injury that occurred within 200 feet of an area with commercial land use in the City of Knoxville.

##### OWNERSHIP



46% on local roads

54% on TDOT  
maintained roads

##### MODE: MOTOR VEHICLES



##### SERIOUS AND FATAL CRASHES

357

##### POTENTIAL COUNTERMEASURES

- Access management
- Driveway improvements, including sight distance improvements
- Lane narrowing
- Controlled pedestrian crossings



Clinton Highway & Callahan Drive / Schaad Road



Strawberry Plains Pike & Region Lane

### Maricopa Association of Governments (MAG) Safety Programs

- MAG's safety program looks to identify current and potential transportation-related safety issues, identify needs in the region, and determine strategies to address them through the MAG Regional Transportation Planning process.
- MAG's completed a Strategic Transportation Safety Plan (STSP) – *Safe System in Action*, which was accepted in June 2021. Key components of the STSP included adopting of the Safe System approach, identifying locations and areas of opportunity, promoting use of high value safety countermeasures, and communicating safety as a shared language.

Strategy	Speed Management (automated enforcement, speed feedback signs)
Action Area	Pedestrian
Participants	MAG, Local Agency
Funding Source	HSIP, RSP, GOHS, Local Agency
Effectiveness	17% to 44% reduction in fatal crashes.
Cost to Implement	\$100,000 automated enforcement; \$5,000 speed feedback sign (GOHS projects, ADOT HSIP projects)
Implementation Schedule	As appropriate
Performance Measures	Number of speed management countermeasures promoted.

- Four action areas were developed from the plan which included pedestrians, intersections, lane departure crashes, and safety-related data.

## 2021 Peer Exchange

- Results from peers in 2021 peer exchange from the Denver Regional Council of Governments (DRCOG), San Francisco Bay Area Metropolitan Transportation Commission (MTC), Portland Metro, and Delaware Valley Regional Planning Commission (DVRPC).
  - [Summary document](#)

## San Francisco Bay Area Metropolitan Transportation Commission (MTC) (2020)

- The MTC Planning Committee established a Regional Safety / Vision Zero Policy in June 2020. The policy establishes a region-wide policy to encourage and support actions towards eliminating traffic fatalities and serious injuries by the year 2030.
- The policy works with partner agencies, is data-driven, equity-focused, provides evidence-based policy, and includes education and engagement.
- Includes a Bay Area Vision Zero Working Group that is an MTC-led panel of officials working towards the shared goal of making the streets safer for all users.

## Portland Metro

- Recently awarded 2.4 million for its Safe Streets for All Action Plan development.
- Previously completed a Regional Transportation Safety Strategy Plan in 2018. This included addressing three top findings for the region to make travel safety for all users:
  - Traffic deaths are increasing and disproportionately impacting people of color, low incomes, and over the age of 65.
  - Traffic deaths are disproportionately impacting people walking.
  - The majority of traffic deaths are occurring on a subset of arterial roadways.
- The plan implements the Safe System approach and focuses on six data-driven strategies to work towards the vision zero goal.

## Delaware Valley Regional Planning Commission

- Recently awarded 1.47 million for its Regional Vision Zero 2050 Action Program.
- Previously completed a 2012 Safety Action Plan.

## What are other Agencies in Wisconsin doing?

### Wisconsin's Highway Safety Plan (2022)

- The State of Wisconsin's Highway Safety Plan (HSP) mission is to reach zero fatalities on Wisconsin's roadways. The HSP is developed using the Wisconsin Strategic Highway Safety Plan as the principal planning document. The HSP goals are to maximize integration and utilization of data analysis resources, represent driver behavior issues and strategies, and utilize statewide safety committees to obtain input from traffic safety partners.
- The HSP planning process is circular and continuous. The plan includes nine state-level program areas. Each program area includes a performance review, which includes justification of need, sets performance measures, and identifies further program needs.



### Wisconsin's Strategic Highway Safety Plan (2023 - 2027)

- The WisDOT Strategic Highway Safety Plan (SHSP) is a statewide comprehensive plan that provides the framework and strategic goals to help reduce fatalities, injuries, and crashes on Wisconsin roadways over a three-year time period.
- The data-driven plan included 11 emphasis areas, derived from 25 safety topics, to address potential hindrances or identify opportunities for process improvements to achieve safety goals. FHWA's Safe System Approach elements were identified within each emphasis area.
- Prioritizing safety goals and initiatives included bringing several safety partners together. This included WisDOT staff, local governments, the private sector, community organizations, law enforcement, and other state agencies. Additionally, the prioritization process involved an online survey and a virtual peer exchange.



### WisDOT Highway Safety Improvement Program (HSIP)

- The HSIP program is intended to fund stand-alone safety projects on state and local roadways. Typically, the funding ratio is 90% federal and 10% local match.
- Applications are accepted annually and require a completed HSIP application form, sketch of the proposed project, crash diagram and crash history, site photos, itemized cost estimate, and a completed project evaluation factor (PEF) analysis worksheet.
- PEF calculations are used to assist in evaluating and comparing proposed projects.
- There is a subprogram as part of HSIP, and that is for High-Risk Rural Road projects. The focus of this subprogram is on local rural minor and major collector corridors, looking specifically at run-off-the-road crashes.

# HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION *(continued)*

Wisconsin Department of Transportation DT1501

Design ID		Tied Project IDs	
Related IDs (CONST) (R/W)			

**1. PROJECT LOCATION**

Name of Road/Intersection			Highway Number
County	City of	Village of	Town of
Name of the MPO the Project is Represented by			
Is this project located on a connecting highway? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Is this project part of a larger improvement project? <input type="checkbox"/> Yes <input type="checkbox"/> No; If yes, improvement project ID			

**2. SEGMENT INFORMATION**

Current Average Daily Traffic		Project Length (miles)	
Crash Rate	Roadway Width	Shoulder Width	

**3. INTERSECTION INFORMATION**

Crash Rate	Entering Vehicle Volume	Roadway Width
------------	-------------------------	---------------

**4. IDENTIFICATION OF HAZARDS**

Describe existing hazards such as: visibility restrictions, curves, hills, intersection problems, bike/pedestrian conflicts, narrow shoulders, rutting, etc.

**5. PROPOSED IMPROVEMENT**

Describe the proposed project and how it will address the identified hazards. In addition, briefly discuss any alternatives considered and why these options are not the preferred alternative.

## Brown County Roadway Safety Plan (2018)


- The goal of the plan is to reduce fatal and serious injury crashes on county roads by prioritizing locations that have safety issues and applying specific safety strategies to these locations.
- The plan implemented a ten-step process, which included extensive data collection, crash analysis, identifying risk factors, prioritizing locations, determining possible safety strategies, creating decision trees, and recommending projects for implementation.

## What is the Greater Madison MPO and Dane County Area doing?


### Connect Greater Madison: 2050 Regional Transportation Plan (2022)

- The purpose of the Regional Transportation Plan (RTP) is to help identify how the region should invest in the transportation system to accommodate current and future travel demands. The Greater Madison Area has experienced aggressive growth in the last 20 years and is estimated to continue to grow between 2020 and 2050. A well-planned transportation network is critical to meet the needs and goals of the region.
- The RTP is updated every five years and is created to help set the framework for how the region will build, manage, and operate its multi-modal transportation system. The RTP identifies six goals in which specify the policies, projects, and strategies to obtain these goals. Performance measures are determined in order to track progress.
- The second goal of the plan is safety. This includes an emphasis on enhanced protection for vulnerable roadway users through the use of the safe systems approach. These goals are incorporated into looking at the future of our transportation system, determining critical issues, new technologies, and considering all modes of transportation to determine key needs and recommendations on how to implement changes and improvements within our transportation system.


### The Connect Greater Madison 2050 Regional Transportation Plan Goals




**GOAL 1: LIVABLE COMMUNITIES**  
Create connected livable places linked to jobs, services, education, retail, and recreation through a multimodal transportation system that supports compact development patterns, increasing the viability of walking, bicycling, and public transit.




**GOAL 2: SAFETY**  
Ensure that the transportation system enables all people to get to where they need to go safely with an emphasis on enhanced protection for vulnerable roadway users through use of a safe systems approach, thereby helping to achieve the long-term goal of eliminating fatal and serious traffic injuries.




**GOAL 3: PROSPERITY**  
Build and maintain a transportation system that provides people with affordable access to jobs, enables the efficient movement of goods and services within the region and beyond, and supports and attracts diverse residents and businesses, creating a shared prosperity that provides economic opportunities for all.



**GOAL 4: EQUITY**  
Provide convenient, affordable transportation options that enable all people, regardless of age, ability, race, ethnicity, or income, to access jobs, services, and other destinations to meet their daily needs; engage traditionally underrepresented groups; and ensure that the benefits of the regional transportation system are fairly distributed, taking into consideration current inequities resulting from past decisions, and that environmental justice populations are not disproportionately impacted.



**GOAL 5: ENVIRONMENTAL SUSTAINABILITY**  
Minimize transportation-related greenhouse gas emissions that contribute to global climate change; avoid, minimize, and mitigate the environmental impacts of the transportation system on the natural environment and historic and cultural resources; and design and maintain a transportation system that is resilient in the face of climate change.

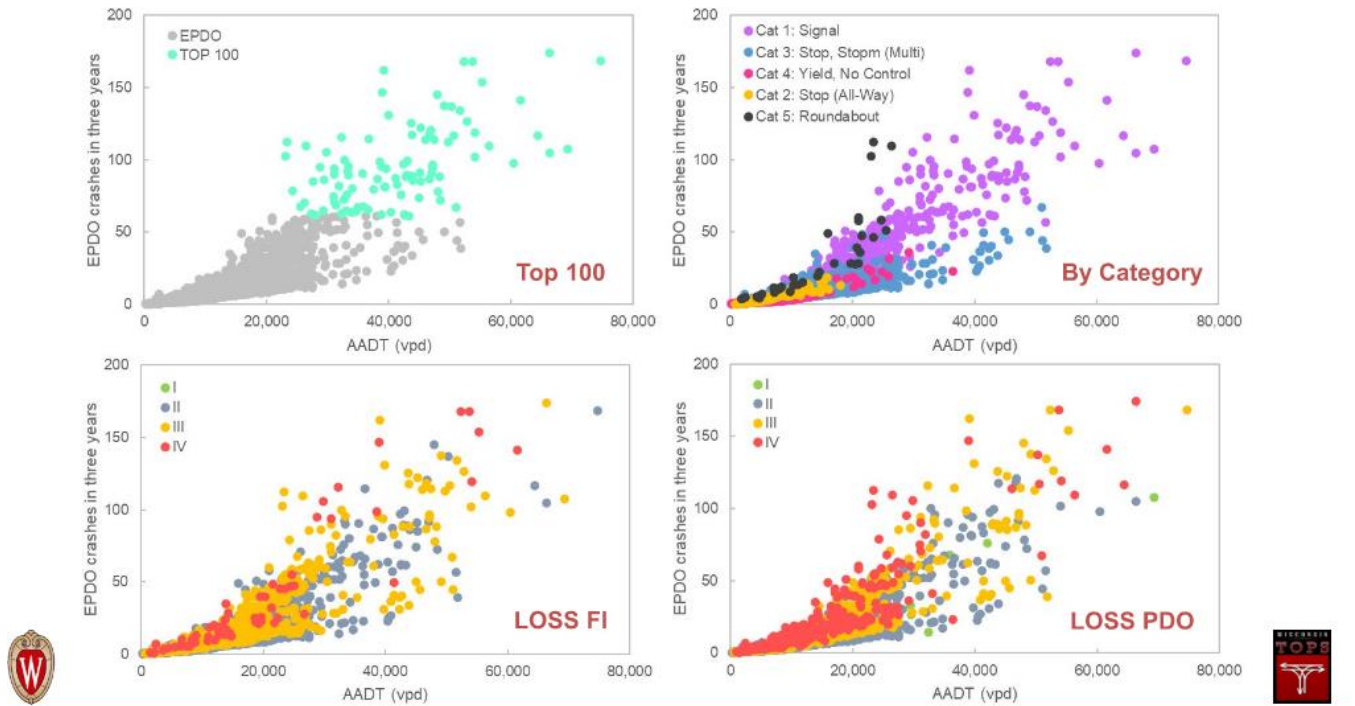


**GOAL 6: SYSTEM PERFORMANCE**  
Maximize the investment made in the existing transportation system by maintaining it in a state of good repair and harnessing technological advances; promote compact development and travel demand management to minimize the need for new roadway lane-miles and maximize mobility options; and manage the system to maximize efficiency and reliability.

### Madison MPO Intersection Safety Network Screening (2019 & 2022)

- The University of Wisconsin Traffic Operations and Safety (TOPS) Laboratory developed a crash prediction model using 2017-2020 WisDOT collision data to identify high-risk locations. The results of the network screening and ranking of high-risk segments resulted in a level of safety score (LOSS) and ultimately the high injury network.
- The network screening consisted of analyzing 4,602 intersections and 2,841 corridors. The data collected included traffic, signal control, speed limit, geometry, crashes, and more.
- To predict crashes per year, the statistical modeling took into account for overdispersion in crash data to develop safety performance functions for each category: Signal, Stop (All-Way), Stop and Stop (Multi), Yield and No Control, and Roundabout.

# Network Screening and Ranking

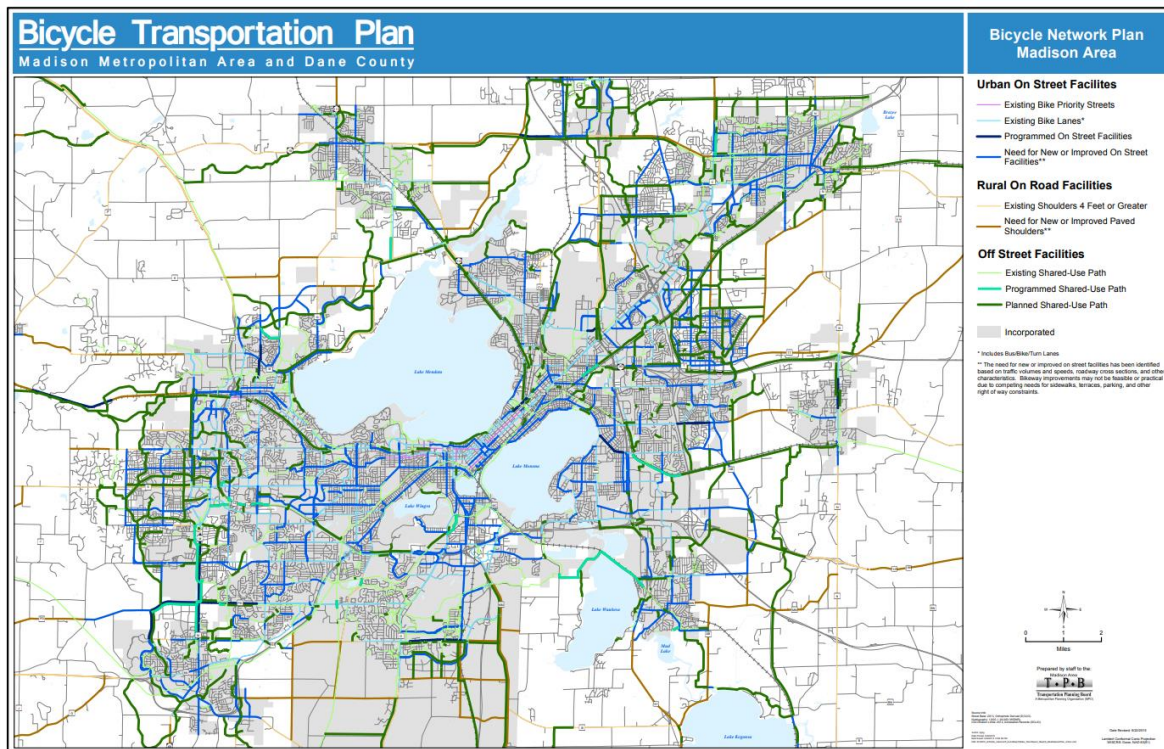


## Bicycle Transportation Plan for the Madison Metropolitan Area and Dane County (2015)

- The goal of the Bicycle Transportation Plan is to serve as a blueprint for continuing to provide and improve bicycle conditions and safety throughout Dane County for all levels of bicycling experience. The plan's vision extends to the year 2050 with the following six main goals:
  - Safety
  - Usage
  - Connectivity
  - Equity
  - Livability
  - Longevity
- The strategies behind the plan include adopting the seven "E's" to help identify strategies to obtain their goals:
  - Education
  - Encouragement
  - Enforcement
  - Engineering
  - Envisioning (Planning)
  - Evaluation
  - End of Trip Facilities and Multi-Modal Connections
- Overall, the plan includes exploring a toolbox of different bicycle facilities that can be provided along the network to improve conditions. Recommendations in the plan include a combination of on-street and off-street improvements to the bicycle network, including enhancing existing facilities as well as future bicycle facilities. Additionally, the plan looks to encourage bicycling within the community by increasing the number of bicyclists and creating an active bicycling culture.



- Accountability of the plan will be completed by the MPO, which will monitor and regularly report on the status of implementation of the bicycle facility network and other plan recommendations and the performance measures provided in the plan.



#### Dane County Bicycle and Pedestrian Crash Study (2018)

- The Dane County Bicycle and Pedestrian Crash Study analyzed crashes involving a bicyclist and/or pedestrian between 2011 – 2015 to identify trends, common features, characteristics, and locations to assist in improving safety for these users. Additionally, other plan goals included assessing the changes in bicycle safety in the City of Madison, since a study was completed in 1992 and setting a benchmark for future safety performance measures throughout the area.
- The study included an extensive review of bicycle and pedestrian-related crash reports over the analysis period. It was determined that speeding, impairment, inattention, and failing to obey traffic controls attributed to the majority of the crashes. These dangerous behaviors can be addressed through education and enforcement. Continuing to provide engineering solutions also helps to mitigate the risk of crashes at specific locations.

#### Pedestrian/Bicycle Facility Requirements, Policies, & Street Standards: Review of Community Requirements in the Greater Madison MPO Planning Area and Recommended Best Practices (2021)

- The goal of this report is to review locally adopted pedestrian/bicycle requirements, national recommendations, and best practices to help local planning and engineering staff and elected officials to make informed decisions when it comes to decisions regarding the development and design of roadways to make them safe for all users.
- The report explores different aspects of the roadway facility including streets; sidewalks, separated paths, bicycle lanes; non-motorized access and circulation standards; equity considerations; and accessibility. Standards and requirements that are currently being provided by Madison area cities, villages, and towns are included to assist in overall recommendations for future policy and design standards.

## City of Madison Vision Zero Action Plan (2022)

- The City of Madison’s Vision Zero Action Plan aims to eliminate all fatal and severe injury crashes on city streets by 2035. To achieve this goal, the priority of the transportation system needs to be shifted from moving vehicles as efficiently as possible to prioritizing safe, healthy, and equitable mobility for all roadway users.
- The plan outlines strategies and actions that need to be taken to achieve the vision zero goal, however, it is intended to be a “living” document that can be changed to address city needs as they evolve.
- The guiding principles of the Vision Zero plan include the following:
  - Prioritizing Safety
    - *Designing streets for people instead of vehicles.*
    - *Take the focus away from trying to make it safer for personal vehicles to move efficiently through the network to focus on safe mobility for all roadway users.*
  - Data Driven
    - *Relies on a data-driven process to determine the best strategies to be implemented and where they would be most effective.*
    - *Expand on data analysis by not just relying on traffic engineers, but involving policymakers, public health officials, police departments, civil rights advocates, and other stakeholders.*
  - Equity
    - *Reduce geographic and racial disparities in crashes by prioritizing street design safety efforts in locations that have been historically marginalized.*
    - *Focus on designing roadways and cultivating a driving culture that puts safety first instead of speed. Understanding that increasing enforcement will not lead the way to zero deaths and severe injuries. Enforcement policies should focus on hazardous behaviors that make an impact on safety, instead of disproportionately targeting people of color.*
  - Engagement
    - *Involving and receiving input from community members will help build the foundation of the plan and the strategies that should be incorporated to make a safer and more equitable roadway infrastructure.*
- “Let’s Talk Streets” is an engagement project that the city has started to gather more information regarding ongoing projects. The goal is to help engage the community and make sure their values and goals are being met and heard.
- The safe systems approach is used in the action plan to address the main factors that lead to death in crashes. The action plan uses the following factors of the safe systems approach:
  - Safe Streets
  - Safe People
  - Safe Vehicles
  - Safety Data
  - Safety Focused Enforcement



Strategies were developed for each one of these factors to take action and move towards the commitment to zero deaths on city streets.



Traditional Approach	Vision Zero
Traffic deaths are inevitable	Traffic deaths are preventable
Aims to fix humans	Changes systems
Expects perfect human behavior	Integrates human failure
Prevents collisions	Prevents fatal and severe crashes
Exclusively addresses traffic engineering	Considers the road system as a whole
Doesn't consider disproportionate impacts	Regards road safety as an issue of social equity

### City of Sun Prairie Vision Zero Initiative

- The City of Sun Prairie's Pedestrian Safety Task Force has undertaken the goals of the Vision Zero initiative. Their goal is to reach zero fatalities and serious injuries to travelers by effective education, engineering, enforcement, and data analysis.
- The Pedestrian Safety Task Force is led by the City's Director of Public Works/City Engineer and has representatives from engineering, public works, Sun Prairie utilities, neighborhood navigators, police and fire departments, and building inspection. They specifically are focusing on safety and creating solutions that will enhance pedestrian safety within their community.
- Some actions they have completed to date include reducing speed limits along certain roadways, using the Transportation Hazard Reporter app for the community to report pedestrian safety hazards, and community involvement events to be able to connect with the task force on ideas and safety improvement strategies.

### Dane County Traffic Safety Commission (TSC) Traffic Safety Emphasis Areas & Work Plan

- The Dane County TSC work plan includes three smart objectives. This includes quarterly multi-disciplinary meetings, using a data-driven process, identifying issues, and developing recommendations to reduce deaths and severe injuries. Additional objectives include implementing projects, creating partnerships that will focus on the four priority areas, and raising awareness of traffic safety in the county.
- The four priority areas include the following:
  - Reducing Risky Driving Behavior
    - *Action items include outreach supporting enforcement, expanding data-informed enforcement, improving distracted driving data collection & identifying countermeasures, and educating on graduated driver licensing.*
  - Reducing Impaired Driving
    - *Action Items include submitting NHTSA's drug-impaired driving evaluation tool, promoting ARIDE training & DRE certification, expanding and coordinating multijurisdictional OWI enforcement, expanding uptake of Place of Last Drink program, and safe communities OWI education campaign.*
  - Pedestrian Crashes
    - *Action Items include an education campaign coinciding with enforcement and a pedestrian safety task force.*

- Racial Disparities with Traffic Injuries
  - *Action Items include organizing a summit on racial disparities with traffic injuries, creating a communication campaign to coincide with the summit, and improving safety features with older vehicles.*
- A Law Enforcement subgroup was formed to coordinate enforcement efforts, improve data collection and reporting, and promote and provide training/educational opportunities.

#### Surface Transportation Block Grant (STBG) Program

- The Greater Madison MPO solicits funding for projects biennially for FHWA STBG-Urban funding (formerly STP). This funding may be used for projects to preserve and improve the conditions and performance on any Federal-aid roadway, for bridge projects on any public roadway, for pedestrian/bicycle infrastructure or programs, and for transit capital projects.
- The various types of projects all have minimum total project costs that are required. Additionally, for the 2024-2029 program cycle, the federal share for new projects will be 65% and the local share will be 35%, for projects costing more than \$1,000,000 and the standard 20% local match will be applied for projects not exceeding \$500,000. Projects between \$500,000 and \$1,000,000 will be based off a sliding scale for cost share.
- Two types of criteria are used in the STBG project section process:
  - Screening Criteria
    - *Ensures that the project meets eligibility requirements, consistent with the goals adopted by Connect Greater Madison: 2050 Regional Transportation Plan (RTP), has local policy body commitment, and a reasonable expectation of implementation.*
  - Scoring Criteria
    - *Designed to incorporate the goals of the Connect Greater Madison: 2050 Regional Transportation Plan and goals of the Infrastructure Investment and Jobs Act (IIJA).*
- Scoring to approve possible funded projects includes the following seven categories:
  - Importance to the regional transportation system
  - System preservation
  - Congestion mitigation/TSM
  - Safety enhancement
  - Enhancement of multi-modal options/service
  - Environment
  - Equity



Scoring for the various types of projects has different weighted values, which reflect on the relevance and significance of each category.

#### STBG-Urban Project Scoring System

Category		Scoring System			
		Roadway	Transit (Infrastr.)	ITS	Bike
<b>1</b>	Importance to Regional Transportation System and Supports Regional Development Framework	18	25	15	25
<b>2</b>	System Preservation	20	15	5	5
<b>3</b>	Congestion Mitigation/TSM	12	15	20	5
<b>4</b>	Safety Enhancement	20	5	20	20
<b>5</b>	Enhancement of Multi-modal Options/Service	12	15	15	25
<b>6</b>	Environment	8	10	15	5
<b>7</b>	Equity	10	15	10	15
<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Note: The Transit (Bus Purchase) project type was removed as a scored project type.  
 Applications requesting bus purchase funding will be evaluated but not scored.

#### Greater Madison MPO Complete Streets Policy

- The Greater Madison MPO adopted a Complete Streets Policy in 2023. The community's input was considered in the planning process to meet safety and equity priorities outlined by the MPO. The goal of the Complete Streets Policy is to promote the development of complete streets projects that are equitable, safe, sustainable and accommodate for all modes of transportation.
- The MPO prioritizes projects in areas that have historically been underinvested in. These neighborhoods lack the infrastructure and facilities needed for an equitable transportation system. The policy is also designed to help serve the needs of disadvantaged communities, such as racial and ethnic minorities and low-income populations.
- The MPO will measure the performance related to the development of the complete street networks annually by monitoring transit ridership, bicycle utilization, pedestrian and bicycle fatalities.

### ADA Transition Plans

- With respect to transportation, the goal of the Americans with Disabilities Act (ADA) is to ensure that pedestrians with disabilities (who may use mobility devices) have an equal opportunity to use the public rights-of-way in the transportation system.
- The Greater Madison MPO provides assistance to agencies within the region to develop their local ADA Transition Plan.

## What are other national and international best practices?

### The World Health Organization and the United Nations Regional Commissions Global Plan for the Decade of Action for Road Safety 2021-2030

- The plan rejects business as usual and calls on governments and stakeholders to take a new path – one that prioritizes and implements an integrated Safe System approach that squarely positions road safety as a key driver of sustainable development.
- It calls for actions that help the world hit the target of 50% reduction in the number of traffic deaths and serious injuries by 2030.

### International Best Practices

- Reduction in speed limits, roadway design to encourage reduced speed, automatic camera speed enforcement, and high fines for speeding are utilized by countries that have experienced a reduction in traffic fatalities and injuries (France, Finland, Canada, and others).

## Other US National Efforts

### The United States Department of Transportation National Roadway Safety Strategy (NRSS) (January 2022)

- The NRSS outlines the Department's comprehensive approach to significantly reducing serious injuries and deaths on our Nation's highways, roads, and streets. This is the first step in working toward an ambitious long-term goal of reaching zero roadway fatalities.
- The NRSS sets a vision and goal for the safety of the Nation's roadways, adopts the Safe System Approach principles to guide our safety actions, and identifies critical and significant actions the Department will take now in pursuit of five core objectives: Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care.

# Appendix 2 - 2050 Regional Transportation Plan Summary





Appendix E:

# Public Participation and Responses to Comments



# APPENDIX G: PUBLIC PARTICIPATION AND RESPONSES TO COMMENTS

## Introduction:

The intent of the RTP is to offer a vision and blueprint for the future of the transportation network in the Madison area. To develop this vision and find consensus between competing interests, it is important to have a robust dialog between the community, stakeholders, and local officials. The MPO staff worked to facilitate opportunities for all interested parties to participate in the planning process and attempted to make that process more inclusive for those that may not feel comfortable or have the time for traditional forms of participation. The public involvement process was broken down into three phases:

- Phase One: Introduction to the Planning Process
- Phase Two: Review of Existing Conditions
- Phase Three: Presentation of the Draft Plan and Recommendations

Due to Covid-19 safety precautions, all public involvement was conducted virtually. A summary of these public engagement activities can be found in Chapter 1. The following is a summary of the materials presented online and at the public information meetings and includes:

- [Focus Group Summary Input](#)
- [Connect Greater Madison RTP Website](#)
- [RTP Public Survey Summary Presentation](#)
- [RTP Public Survey Full Results](#)
- [Public Involvement Meeting #1 – Meeting Presentation and Attendee Overview](#)
- [Public Involvement Meeting #2 – Meeting Presentation and Attendee Overview](#)
- [Public Involvement Meeting #3 – Meeting Presentation and Attendee Overview](#)
- [Phase 2 – RTP Comment Maps](#)
- [Outreach methods](#)

# FOCUS GROUP SUMMARY INPUT



## Connect Greater Madison – Regional Transportation Plan 2050

### Community Focus Group Conversations

#### Focus Groups

Bayview:	May 4, 2021 (5 participants)
Latino Academy:	May 5, 2021 (15 participants)
	May 7, 2021 (15 participants)
Sun Prairie:	May 26, 2021 (4 Participants)

#### Key Issues *(Note: Many comments below are paraphrased.)*

##### Cost of Transportation

Transportation is expensive for focus group participants. Owning a car is expensive, but it is faster and provides access to more destinations. For transit-dependent participants, ride-hailing is a costly solution that is often used to get to essential destinations like grocery stores and pharmacies in a timely manner (and in the case of grocery stores, to be able to carry home enough food). For some, the cost of a monthly Metro pass is disproportionate to their income.

- “My car payment is my biggest expense. Having a car for regular use means that I have to sacrifice a lot of things in the rest of my life. The money we spend to have that car so that we can have flexibility means that we don't have money to spend on other things. For example we can't go on trips, spend money on meals, or do fun extra activities.” (Bayview)
- “Cabs are costly, usually \$20-\$30 one-way, plus more to tip, so I have to make difficult decisions about which appointments or grocery store to go to. I take a cab to get groceries about once a month so that I can bring home a lot of bags.” (Bayview)
- “Sixty-five dollars for a monthly Metro pass is very high for people with incomes like mine, but the income level for a discounted pass is very low, poverty level. There needs to be a different threshold for low-income families, more like the free school lunch threshold.” (Bayview)



- “I usually spend \$40/week on gas, but that is just on gas. If we have technical issues with the car, then we have to invest more; especially if I do not know how to use the bus, I then have to rent a car and that is very expensive. Recently I had to rent a car to be able to get to work when my car was at the mechanic; I spent around \$600 in one week.” (Latino Academy)
- Bayview participants expressed a strong preference to grocery shop at Woodman’s due to the variety, affordability, and the fact that the store carries more food from their home countries; however, they also noted that the farther one goes from Bayview, the lower the cost for groceries and meals, but the more expensive and time-consuming transportation becomes.
- Sun Prairie participants reported owning a vehicle or sharing ownership with another family member, but the cost of fuel, repairs, and insurance causes them to minimize use. Taxis are sometimes needed, but expensive; only Sun Prairie Transit (shared ride taxi) is at all affordable.

## Inconvenience of Public Transit

**Focus group participants expressed a strong desire to use public transportation more often if it was more frequent, accessible, and convenient. Participants who own cars rely mainly on driving because it is faster than the bus and increases access to more destinations. For transit-dependent participants, accessing essential destinations in a timely manner is often very difficult.**

- “The only reason I use my car is because public transportation is not available where I live (Sun Prairie). I am forced to use my car. However, I do not like to drive because I do not want to get in trouble. I do not like to drive in places, towns I am not very familiar with.” (Latino Academy)
- “Using my car is faster than using public transportation. Previously when I used public transportation, it did not allow me to do many things during the day. I used to spend up to three hours if I wanted to go to the mall. It is better for me to drive my car.” (Latino Academy)
- “The bus is not much available at night and during the weekends. Our community does not work from 9 am to 5 pm. Our community works from 4 am to 1 pm, 1 pm to 8 pm, 8 pm to 3 am and there is no public transportation to meet those different schedules.” (Latino Academy)
- “The main reason I use my car is to save time. It is more convenient.” (Latino Academy)
- “Time and efficiency is really important to me. My workplace [Freedom, Inc.], does not have easy access to bus lines. When I drive my car, it is a lot faster. Because of my kids, I don't have a lot of extra time to wait for the bus. I also worry about safety from COVID on the bus.” (Bayview)



- Half of all Latino Academy Focus Group participants reported they would use public transportation if it was more convenient and accessible to them.
- All Sun Prairie participants expressed that full-day local bus service is needed in Sun Prairie.

## Knowledge and Language Barriers

**Many focus group participants expressed a lack of knowledge or familiarity with public transit that prevents them from riding the bus. In some cases, this was language-based; in others, it related to a general lack of comfort with or knowledge about how to navigate the transit system. There was also a widespread lack of knowledge about specialized transportation programs and services that may be helpful, such as those provided by Dane County and local senior centers.**

- “I use my own car but I would like to learn how to use public transportation. My job is as a nail technician and I go to various locations in town, especially I would like to learn how to use the bus for when I do not have a car (if car breaks down), what I will do or how would I travel to do my work since I do not know how to use public transportation.” (Latino Academy)
- “I believe that Metro System makes it easier for people to get around but many people decide not to use public transportation because it is a very lengthy and slow system. There is also a lack of knowledge about bus routes.” (Latino Academy)
- “I’m not sure if my scooter [power wheelchair] can fit on the bus. I’ve also heard that a bus ride is expensive now, and I’ve wanted to call Metro to ask, but haven’t done that. It would be great to have a smaller bus option that can take residents to places like Woodman’s to get culturally specific foods. That would feel safer. I was overwhelmed by the idea of needing to transfer on the south side to get to Woodman’s.” (Bayview)
- “If there were programs that could help people learn how to use public transportation, it would be great for us to enroll so we can learn to use public transportation, since that is very beneficial to the community.” (Latino Academy)

## Access for People with Disabilities

**Focus group participants with mobility limitations expressed challenges to accessing public transit and using sidewalk networks due physical challenges or discomfort/lack of knowledge about options.**

- Sun Prairie participants said that barriers caused by incomplete and poorly maintained sidewalk networks make mobility difficult, especially during winter.





- Sun Prairie participants also reported that a shared taxi ride to Walmart can be as long as 45-60 minutes one-way due to long wait times, even though it is down the street. Although necessary due to their age/disability, the trip is far too long to be making four to five times per month.
- A Bayview participant stated that construction often closes sidewalks, forcing pedestrians to walk/wheel in the street.

## Impacts on Family and Community

**Focus group participants shared that the transportation barriers they face make it difficult and sometimes impossible to meaningfully engage with their family and community. Some expressed frustration with having to rely on family for transportation, which limits their independence and strains family resources.**

- “The bus is often hard with too many transfers and unreliable timing. My kids want to go to sporting events and want me to participate in their activities, and I often make excuses that I have a headache because it’s too hard to get there by bus.” (Bayview)
- “I would like to be able to get to places like the mall or the casino by myself with my scooter [power wheelchair], so that I don’t have to rely on family all the time.” (Bayview)
- “It is hard to be involved with kids’ after school activities and things like parent-teacher conferences due to transportation limitations.” (Bayview)
- “I would like to be a part of the community and go to farmers markets, make trips to Madison and go to other events, but I cannot due to limited bus service.” (Sun Prairie)

## Bicycling Pros and Cons

**Some participants shared comments about bicycling. They enjoy bicycling (or the idea of bicycling), and feel that it is healthy and affordable; however, many avoid it due to fear of riding on roads.**

- “The pros of bicycling are that it gives me a sense of autonomy, it’s inexpensive, which is a big incentive, and it’s flexible. I can get around easily and there are no parking constraints or fees. The cons are that my kids may not always want to go with me and grocery shopping on a bike is hard; I will make 10-12 trips/month with two kids. I also need to get winter wheels.” (Bayview)
- “I would like more access on the sidewalks because I’m afraid to bike in the streets.” (Bayview)
- “I like to bike, but I don’t do it that much. It’s healthy. I would like to bike more if there were more paths, because I’m not confident on a



bike.” (Bayview)

## Connect Greater Madison RTP Website

At the start of the planning process, the MPO worked with a consultant to create an interactive website for the RTP in an effort to increase public participation and interest in the planning process. The website, [greatermadisonmpo.konveio.com](http://greatermadisonmpo.konveio.com), provided project news, descriptions of the plan development process, a listing of RTP related boards and committees and corresponding membership, a timeline of public engagement activities and meetings, links to related plans and studies, information about the MPO, and interactive tools at specific points in the planning process. The website also includes Spanish translation of key plan information.



# RTP Public Survey Summary Presentation

From June 4th to July 11th, the MPO conducted an online public survey as part of the public engagement process for the RTP 2050 Update. A summary presentation was given to the MPO Policy Board on August 4, 2021.



## RTP 2050 Update: Public Survey

### Shared and Promoted Via:

- Press and Media Release
- Local Municipality Facebook Post
- Weekly Facebook reminders



### Responses Received:

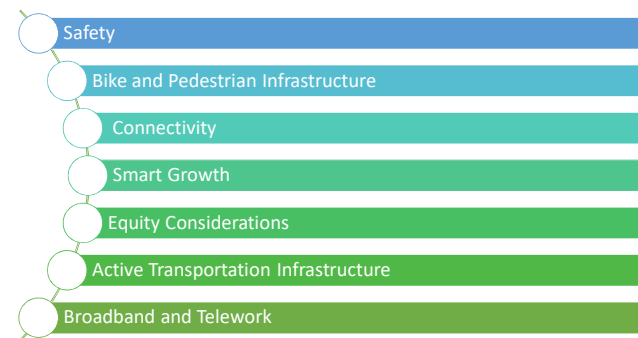
- 871 Total Responses Received
- 274 Human Responses

## What we asked:

- Rating current conditions (Q1)
- What needs to be improved (Q2, Q3)
- Important transportation issues facing the region and other transportation considerations (Q4, Q5)
- Support for different policies and funding options (Q6, Q7)
- How are we doing (Q8, Q9, Q10)
- Demographic Information (Q11 – Q18)

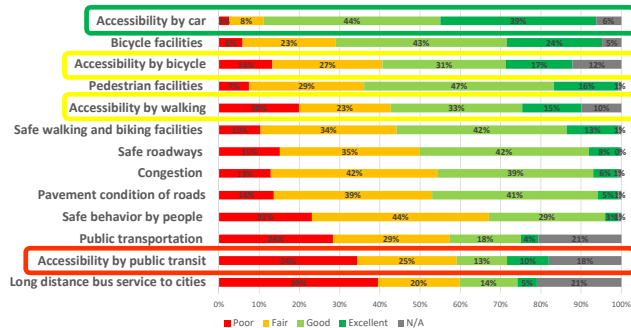


## Key Themes

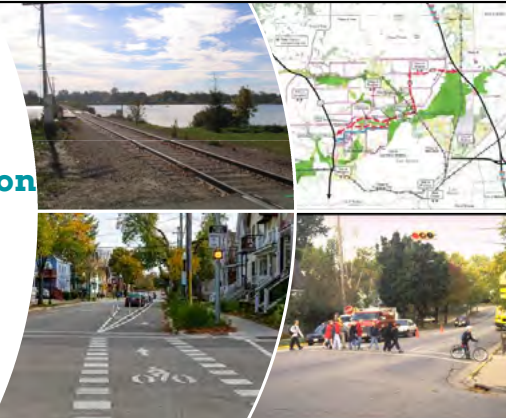




## Quality of Existing System



## Regional Transportation Investment Priorities



## Most Important Issues

- Maintain and improve existing infrastructure
- Expand and improve public transit
- Reduce impact of climate change

### Respondents' Least Important Issues:

- Congestion
- Technology Improvements



## Themes: Improve Safety

### By the Numbers:



### Insights:

"I live on the corner of S. Mills St and Drake St. A very dangerous intersection. Cars (and bikes) running the stop sign constantly!"

Add sidewalks in communities that have none to encourage walking over driving. Prioritize public transit and bike/foot travel over cars. My neighborhood has no sidewalks. It's very dangerous.

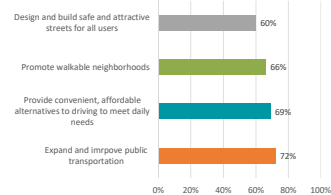
### Comment Responses:

- Speeding (particularly on East Washington)
- Distracted driving
- Design for safety

## Themes: Improve Regional Connectivity

### By the Numbers:

Strong Support of the Following:



### Insights:

"Bus and other services to and from McFarland are a MUST!!!"

"We spend a lot of time driving and not with our families and lives in this town. Until technology moves us to the next things, cars are the thing that allows us quality time in our lives. Please don't make it worse."

"Improving the frequency and destinations of the bus system is a top priority"



## Themes: Improve Inter-City Connectivity

"We badly need rail to major cities like Green Bay, Minneapolis, Chicago, Milwaukee etc."

"I would like to see an intermodal station. It's insane that Dubuque has a fantastic one and we've got - a bus stop at Dutch Mill Park and Ride."



## Theme: Promote Smart Growth and Smart Land Use Planning

Reduce VMT, plan for density, walkable development and parking policies



"It'd be great if amenities (grocery stores, schools, libraries, and jobs) were spaced out among residential zones so that you'd never have to work/go to school/shop outside of reasonable walking distance. I don't like how the city seems to be set up \*for cars\* rather than \*for people\*"

"I would like to see on street parking removed on a broad scale, and the cost of parking increased. It's practically free to park in a ramp downtown!"



## Equity Considerations

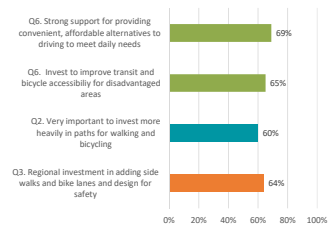
"With an aging population, consideration of transportation options that encourage independence, safety, and ease of use for seniors no longer able to drive (or bike) is important in supporting normal activities."

"...I think Madison gets a little too caught up on their image and that inadvertently hurts the lower income folks of the city. We need better bus service and more reliable transportation for this group of people"



## Theme: Improve Active Transportation Infrastructure

### By the Numbers:



### Insights:

"Madison is consistently known at a bicycling hub, and this is what attracts young people and encourages a healthy & sustainable life/transport. I would love to continue to see the path infrastructure grow to increase ridership."

"We need a better bikeway to get to the UW campus from Fitchburg and other points south."



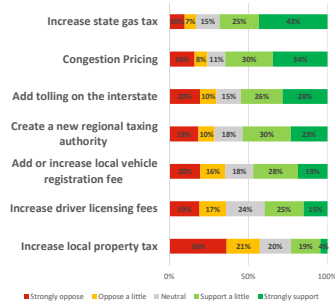
## Themes: Telework & Broadband

"Expand broadband access to support more remote work and decrease car traffic!"

"I would like to see more support for broadband for low income households and encouraging employers to shift to workers to one day remote work per week to reduce congestion."



## How do we get there?: Finance and Funding



### Response:

"This area is insanely expensive to live in and we keep getting slammed with increases in pricing. I find it hard to want to support further increases, even though they clearly need improvement over time."

"We need regional, equitable funding that ideally places the burden of cost on the most inefficient road users (cars)."



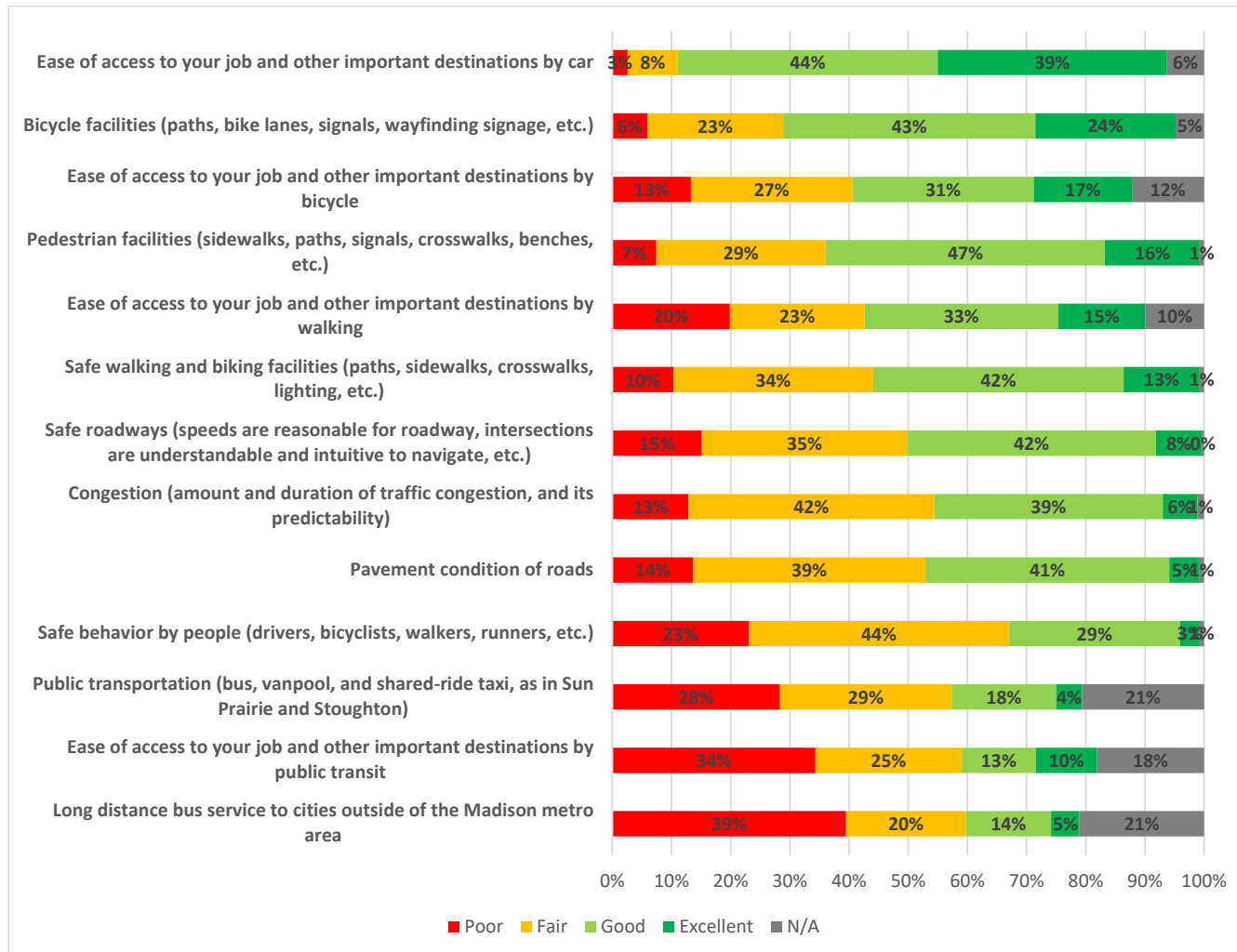
## Questions?



# Connect Greater Madison RTP 2050 Survey Full Results

## Connect Greater Madison RTP 2050 Public Survey

Question 1: Based on your experience, how would you rate the **quality** of the following?



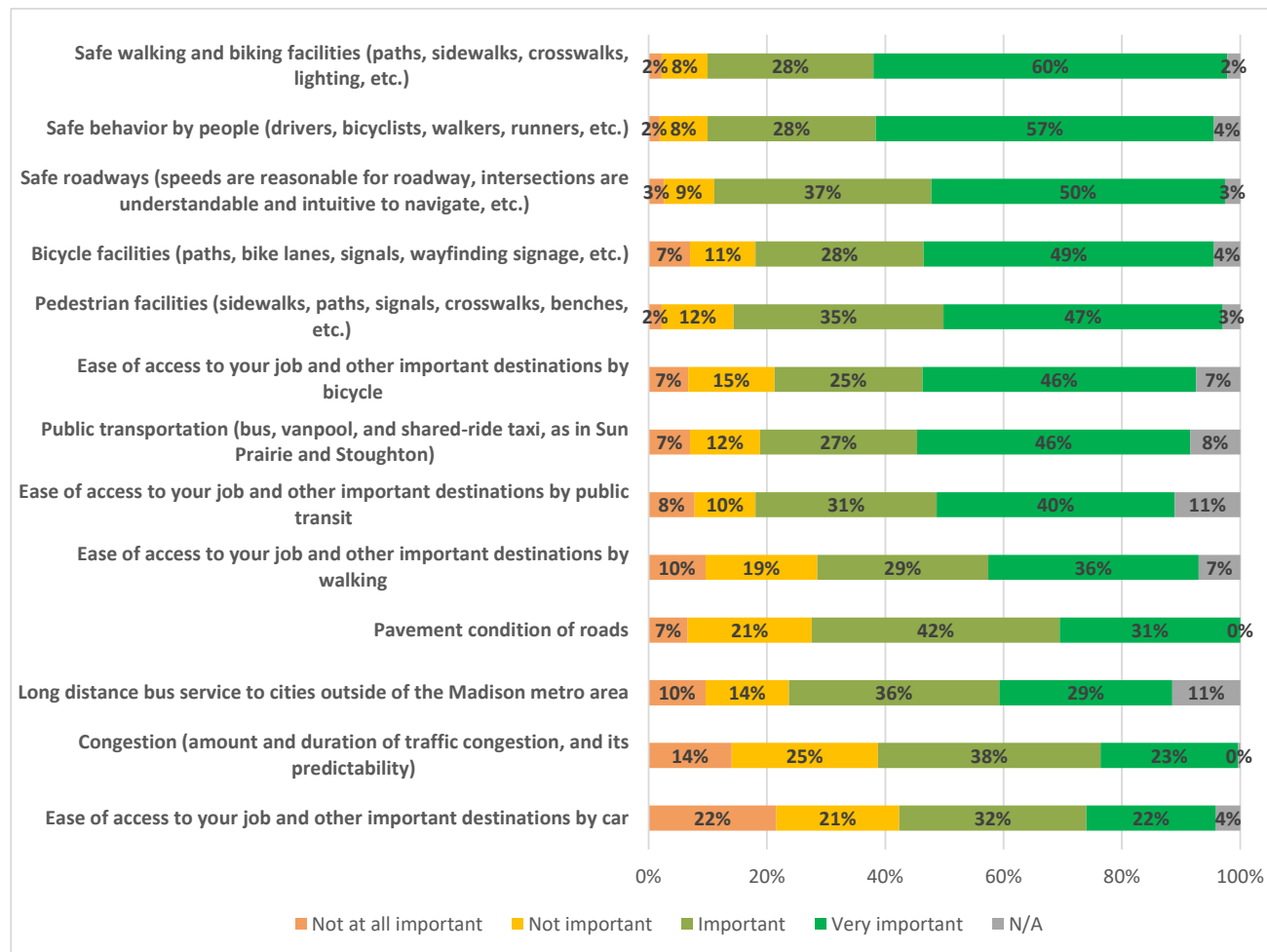


## Connect Greater Madison RTP 2050 Public Survey

Answer Choices	Poor	Fair	Good	Excellent	N/A	Total
Ease of access to your job and other important destinations by car	3%, (7)	8%, (23)	44%, (119)	39%, (105)	6%, (17)	271
Bicycle facilities (paths, bike lanes, signals, wayfinding signage, etc.)	6%, (16)	23%, (62)	43%, (105)	24%, (64)	5%, (13)	270
Ease of access to your job and other important destinations by bicycle	13%, (36)	27%, (74)	31%, (83)	17%, (45)	12%, (33)	271
Pedestrian facilities (sidewalks, paths, signals, crosswalks, benches, etc.)	7%, (20)	29%, (77)	47%, (127)	16%, (43)	1%, (2)	269
Ease of access to your job and other important destinations by walking	20%, (54)	23%, (62)	33%, (89)	15%, (40)	10%, (27)	272
Safe walking and biking facilities (paths, sidewalks, crosswalks, lighting, etc.)	10%, (28)	34%, (92)	42%, (115)	13%, (35)	1%, (2)	272
Safe roadways (speeds are reasonable for roadway, intersections are understandable and intuitive to navigate, etc.)	15%, (41)	35%, (94)	43%, (114)	8%, (21)	1%, (1)	271
Congestion (amount and duration of traffic congestion, and its predictability)	13%, (35)	42%, (113)	39%, (105)	6%, (16)	1%, (3)	272
Pavement condition of roads	14%, (37)	39%, (107)	41%, (112)	5%, (14)	1%, (2)	272
Safe behavior by people (drivers, bicyclists, walkers, runners, etc.)	23%, (63)	44%, (120)	29%, (79)	3%, (9)	1%, (2)	273
Public transportation (bus, vanpool, and shared-ride taxi, as in Sun Prairie and Stoughton)	28%, (77)	29%, (79)	18%, (48)	4%, (12)	21%, (56)	272
Ease of access to your job and other important destinations by public transit	34%, (93)	25%, (67)	13%, (34)	10%, (28)	18%, (49)	271
Long distance bus service to cities outside of the Madison metro area	39%, (107)	20%, (55)	14%, (39)	5%, (13)	21%, (57)	271

## Connect Greater Madison RTP 2050 Public Survey

## Question 2: How important is it to you that the current quality of each of the following be improved?

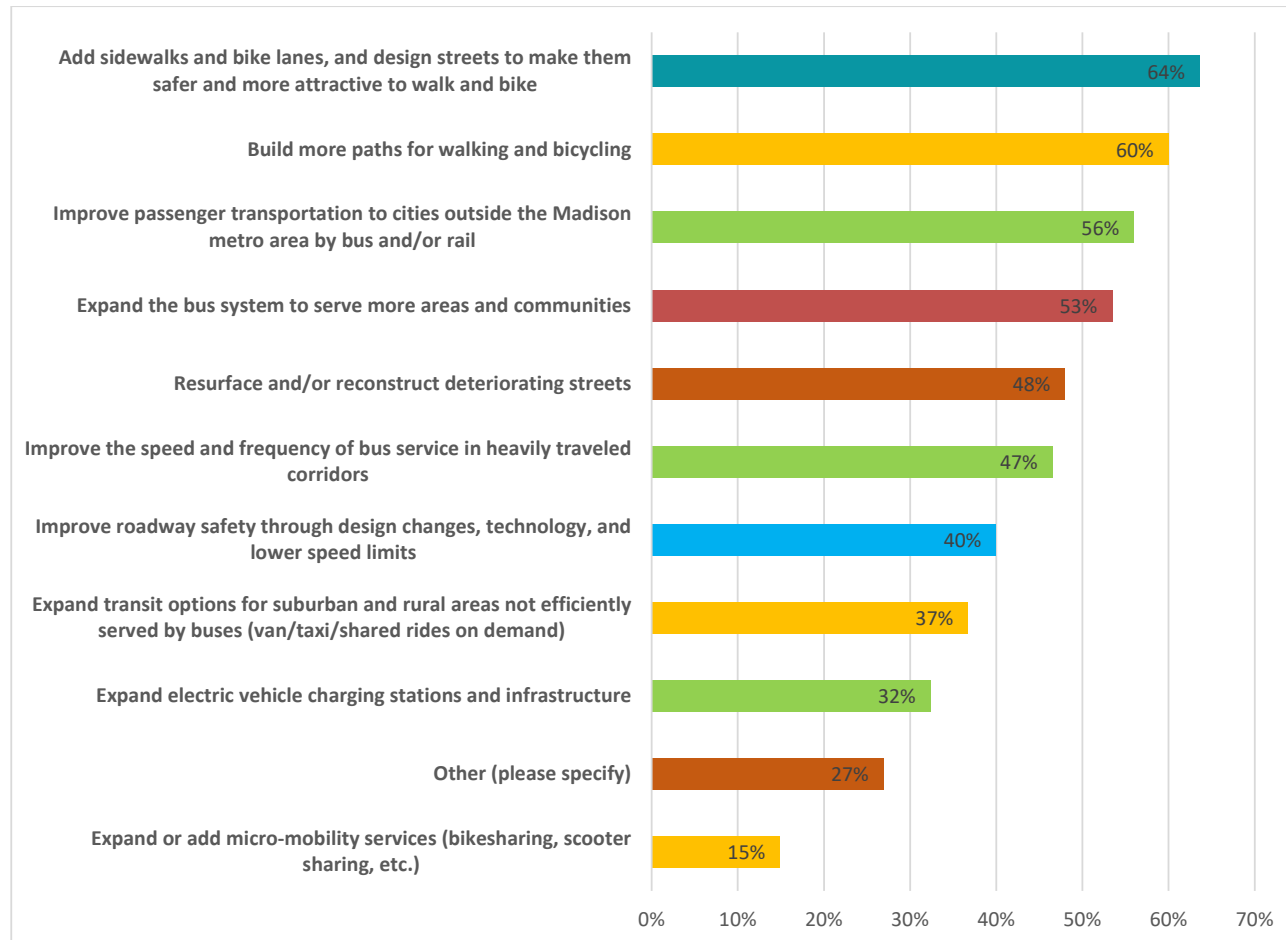


## Connect Greater Madison RTP 2050 Public Survey

Answer Choices	Not at all important	Not important	Important	Very important	N/A	Grand Total
Safe walking and biking facilities (paths, sidewalks, crosswalks, lighting, etc.)	2%, (6)	8%, (21)	28%, (76)	60%, (162)	2%, (6)	271
Safe behavior by people (drivers, bicyclists, walkers, runners, etc.)	2%, (5)	8%, (22)	28%, (77)	57%, (155)	4%, (12)	271
Safe roadways (speeds are reasonable for roadway, intersections are understandable and intuitive to navigate, etc.)	3%, (7)	9%, (23)	37%, (99)	50%, (134)	3%, (7)	270
Bicycle facilities (paths, bike lanes, signals, wayfinding signage, etc.)	7%, (19)	11%, (30)	28%, (77)	49%, (133)	4%, (12)	271
Pedestrian facilities (sidewalks, paths, signals, crosswalks, benches, etc.)	2%, (6)	12%, (33)	35%, (96)	47%, (128)	3%, (8)	271
Ease of access to your job and other important destinations by bicycle	7%, (18)	15%, (39)	25%, (67)	46%, (124)	7%, (20)	268
Public transportation (bus, vanpool, and shared-ride taxi, as in Sun Prairie and Stoughton)	7%, (19)	12%, (32)	27%, (72)	46%, (125)	8%, (23)	271
Ease of access to your job and other important destinations by public transit	8%, (21)	10%, (28)	31%, (83)	40%, (109)	11%, (30)	271
Ease of access to your job and other important destinations by walking	10%, (26)	19%, (51)	29%, (78)	36%, (96)	7%, (19)	270
Pavement condition of roads	7%, (18)	21%, (57)	42%, (114)	31%, (83)	0%, (0)	272
Long distance bus service to cities outside of the Madison metro area	10%, (26)	14%, (38)	36%, (96)	29%, (79)	11%, (31)	270
Congestion (amount and duration of traffic congestion, and its predictability)	14%, (38)	25%, (67)	38%, (102)	23%, (63)	0%, (1)	271
Ease of access to your job and other important destinations by car	22%, (58)	21%, (56)	32%, (85)	22%, (59)	4%, (11)	269

## Connect Greater Madison RTP 2050 Public Survey

### Question 3: What types of transportation projects would you like to see our region invest in more heavily? (Select up to 6)





## Connect Greater Madison RTP 2050 Public Survey

## Answer Choices

## Responses:

Add sidewalks and bike lanes, and design streets to make them safer and more attractive to walk and bike	64%, (175)
Build more paths for walking and bicycling	60%, (165)
Improve passenger transportation to cities outside the Madison metro area by bus and/or rail	56%, (154)
Expand the bus system to serve more areas and communities	53%, (147)
Resurface and/or reconstruct deteriorating streets	48%, (132)
Improve the speed and frequency of bus service in heavily traveled corridors	47%, (128)
Improve roadway safety through design changes, technology, and lower speed limits	40%, (110)
Expand transit options for suburban and rural areas not efficiently served by buses (van/taxi/shared rides on demand)	37%, (101)
Expand electric vehicle charging stations and infrastructure	32%, (89)
Other (please specify)	27%, (74)
Improve traffic flow on major highways through roadway expansions and technology solutions	24%, (67)
Expand or add micro-mobility services (bikesharing, scooter sharing, etc.)	15%, (41)

## Connect Greater Madison RTP 2050 Public Survey

**Other (please specify)****Write-in responses:**

Make speed limits on East Wash reasonable again. More speed and parking enforcement in residential areas (Elvehjem!).

Add a train connection to Amtrak to increase ease of getting to Mpls, Milw and Chicago

Rail options to major cities of Chicago and Minneapolis.

Expanding traffic volume on the Beltline with the recent Verona Road project was a pathetic blunder that harms human health and forces Madison residents to suffer all the consequences of increased air pollution, noise and collision dangers. We needed a BYPASS for all the traffic passing through on the Beltline that needs no access into Madison. Opening the shoulder to rush hour traffic is another assault on Madison residents, not to mention people needing to pull over safely onto the shoulder for emergencies. Commuters outside the city need to use transit and high-density ride-shares. The land and money being spent on parking is a massive waste, when that land is needed to denser, AFFORDABLE housing. We need to use the RAIL CORRIDOR from Sun Prairie to Middleton for commuter rail, and instead of having more busses in the BRT program, we need to use busses to shuttle students, workers and shoppers to and from the rail line. Now that the pandemic is waning, traffic congestion is once again building back to its pre-pandemic levels of idiocy.

I didn't select "improve traffic flow . . ." because of roadwork currently being done to address that issue.

SERIOUSLY CONSIDER UTILIZING THE EXISTING RAIL NETWORK (OWNED BY THE STATE) FOR COMMUTER SERVICE. AT LEAST TRY A TWO-YEAR TEST USING LEASED EQUIPMENT.

We badly need rail to major cities like Green Bay, Minneapolis, Milwaukee etc. Sure would be nice to have kinetic pavement in high traffic areas in Madison. So cool.

Improving the frequency and destinations of the bus system is top priority.

Better, more consistent police enforcement around distracted and drunk driving. It's kind of bananas how it's socially acceptable to willingly endanger friends and neighbors in Wisconsin.

We badly need rail to major cities like Green Bay, Minneapolis, Milwaukee etc. Sure would be nice to have kinetic pavement in high traffic areas in Madison. So cool.

Close State Street and make it a Pedestrian walkway

I really wish there was a way to convince drivers to take public transportation.

The condition of streets a safety hazard for drivers and bikers

### Connect Greater Madison RTP 2050 Public Survey

I have not liked the changes at all to the PD/Verona Road intersection and access to Verona Road, and access from Verona to the Home Depot area. The design is confusing, complex, and a mess.

Reduce vehicle capacity on urban arterials which are killing people and creating a barrier, replace with transit and separated bike facilities.

We need a rail system in Madison. How there isnt a train from Sun Prairie to MSN to the Capitol to Campus to the Hospitals to Middleton to Verona to Epic is beyond me, but we have to commit to something better than the Belt line.

Electric bicycles expanded to connect with Madison system

Build North Mondata Parkway and Build a new South Beltline corridor.

We need more roundabouts. Specifically, on Sigglekow Rd where intersecting with: 1) Valle Rd/Freedom Ring Dr, 2) Autumn Ln/Freese Ln , 3) Marsh Rd, and 4) Holsher Rd. It would slow down traffic naturally and let folks out of subdivisions where it's hard to get out of with the current four way stops (Freedom Ring/Valley) and Holsher Rd intersections. PLEASE consider putting in roundabouts.

Many work zones are confusing to drive through and some work zones exist for multiple years. Improved winter maintenance of streets.

Bus and other services to/from McFarland are a MUST!!!

When we have a battery the size of a gas tank that holds a charge for a 1000 miles and will fully charge in two hrs the technology and resources are here for a green world.

Discourage single passenger trips

North Mendota Parkway is long over due

We live in Fitchburg and bike to Verona for work. Verona has the worst biking infrastructure, please prioritize Verona here.

It'd be great if amenities (grocery stores, schools, libraries, and jobs) were spaced out among residential zones so that you'd never have to work/go to school/shop outside of reasonable walking distance. I don't like how the city seems to be set up \*for cars\* rather than \*for people\*

Work with city planners to \*\*reduce the need for transportation\*\*, by ensuring that all urban and suburban residents are within walking and/or biking distance of popular retail destinations (grocery stores, restaurants, etc), and don't have to cross any dangerous roads to get there.

Add sidewalks to residential areas in Cross Plains.

Primary issue for not using other transportation to other cities is combination of cost and time. pretty much HAVE to drive to a place to get on mass transit to go anywhere outside the city.

North Mendota Parkway

## Connect Greater Madison RTP 2050 Public Survey

na

Would like to see rail projects to help service surround areas of Madison, and to service outside of Dane county

More non-stop cities from DCRA

Enforcing all traffic laws against sociopathic drivers, of which we have tons

Who is to pay for these improvements? This should be a three part question, i.e., between now and 2030 and then from 2030 to 2040 then 2040 to 2050.

Electric vehicle charging will be important in the future, but I think will be handled by private business. Government needs to make public transit, biking, and walking convenient, affordable, and safe.

I would love to see passenger trains in Madison. I would love to electric buses, including school buses. Focus on fixing the streets and bridges we have, not on adding more.

make developers pay for expansion for future traffic they cause (impact fees)

Stop the drag racing on E Washington Ave - it's a loud and continual hazard for those living within a mile of it.

Build the northern beltline that has been on the maps since 1970. Stop attempting bandaid solutions in residential corridors and county roads that waste money and will never solve the real problem of getting people where they need to go.

North Mendota Parkway is way overdue!

Plan for greater use of autonomous electric vehicles. Perhaps consider support for autonomous vehicle sharing services.

Build the North Mendota Parkway

instead of expanding ways for people to get to work...encourage at a minimum work at home options. The one good thing about Covid---shows it can work. Maybe not fulltime but part time would greatly reduce work related traffic.

Some speed limits should be raised, to relieve congestion, i.e. beltline speed limit should be 65, same for hwy 12 to Sauk City. No speed limit should be lowered, that only increases congestion, roads design should be changed to improve safety NOT lower speeds.

Make public transit more attractive by subsidizing or eliminating fares.

The number of people running red lights is absolutely shocking! It's really ramped up. Camera's, traffic cops, whatever can be done SHOULD be done, stat!

Favor rail transportation to destinations outside of Dane County. Particularly Chicago.



### Connect Greater Madison RTP 2050 Public Survey

I like the idea of bikeshare and such, but it is notoriously implemented in a way that doesn't serve lower-income areas of cities. And, as a person without a smartphone, I find that in other cities I visit I am unable to use the scooter systems they have there. I do use BCycle in Madison and like it very much but if it were expanded I'd hope we could be intentional about equitable access.

This entire survey is pointless. Whoever wrote it and whoever approved it should go to college. These questions directly lead the people taking the survey to answer exactly as the department wants to. It's honestly embarrassing that you're even sending this out.

Add way finding signs along bike routes.

Yes rail, please!

Eliminate creating high speed corridors like Monroe St. etc. at special hours of the day. Slow this down, tie it up, I don't care....instead give people park & ride lots. Get the traffic out of our neighborhoods.

rail access to other cities!!!

More educational outreach to all users of the system, especially drivers.

Glowing side walks/bike trails for safety/visibility at night without contributing to light pollution. More protected bike lanes. Stop signs rather than yield signs for roads intersecting bike paths. Signs indicating "look out for bikes and pedestrians". High speed rail to Minneapolis!

More folks on good public transportation, walking& biking= less traffic congestion

Trolley or Light rail from East Towne to West Towne

Nothing to add.

I live on the corner of S. Mills St and Drake St. A very dangerous intersection. Cars (and bikes) running the stop sign constantly!

prioritize rapid transit options within the city and between cities.

improve traffic flow on bike paths at intersections: better-timed lights for bike traffic, accomodation for bikes with a larger turning radius (cargo bikes, bikes with trailers), accomodations for more bikes merging on to bike path from intersection and for more bikes on traffic islands.

Bike paths are recreational, they are not transportation. Please pay attention to Madison's North Side, which needs safe bicycle transportation. Rail is key for regional transportation.

Removing freeways/urban highways like Stoughton Road, Highway 30, or Campus Drive and turning them into surface streets

1. Build North Mendota Parkway.

### Connect Greater Madison RTP 2050 Public Survey

The city needs to focus on mass transit as a primary transportation method instead of focusing on commuter needs. It is impossible to take a bus across town or to any of the hospitals during off hours without several transfers and at least an hour of time

Shared streets where driving is at pedestrian speeds.

Non-auto transportation method/supports which are visually attractive, e.g. attractive bus stops and buses (or rail if that's feasible), and separated bike paths in lieu of car lanes which are lined with vegetation, and city/county owned rain gardens in lieu of parking spaces

Expand BRT and feeder buses to BRT. Dramatically increase gas costs so people take the bus (we've seen that work before, and people are healthier and happier). Penalize large cars.

Light rail

Prioritize walking, biking then local and intercity bus and rail, and only after that EVs. Give transportation equity and accessibility priority.

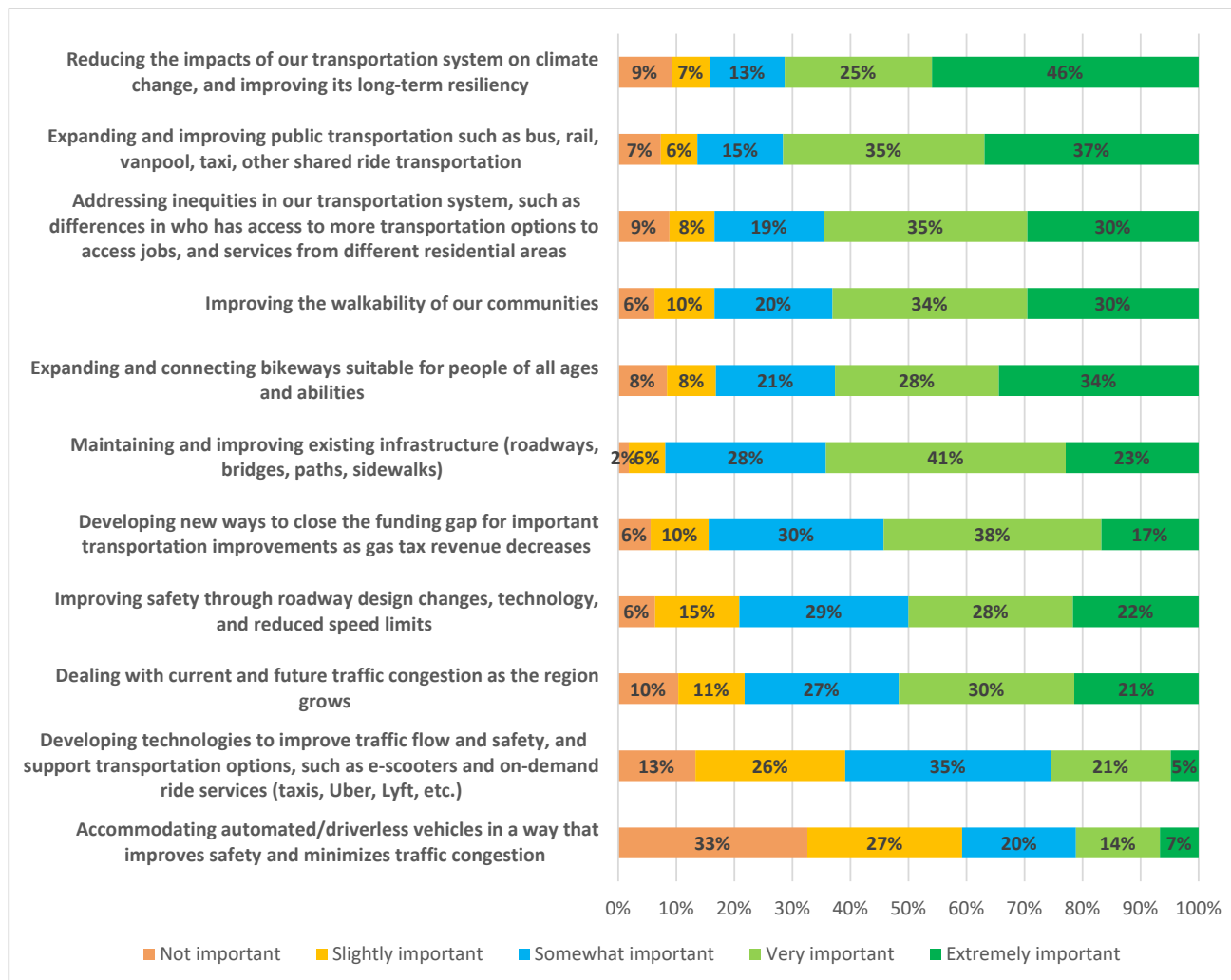
Install Bike Cages, Park and Ride Lots and High Speed Trains

Improve rail to cities and destinations outside of Madison, for example the Dells, Chicago, Milwaukee, and other local areas.

Include options for Cottage Grove either by freeway or county road

## Connect Greater Madison RTP 2050 Public Survey

## Question 4: In your opinion, what are the most important transportation issues facing the Madison region over the next 30 years?



## Connect Greater Madison RTP 2050 Public Survey

Answer Choices	Not important	Slightly important	Very important	Somewhat important	Extremely important	Grand Total
Reducing the impacts of our transportation system on climate change, and improving its long-term resiliency	9%, (25)	7%, (18)	13%, (35)	25%, (69)	46%, (125)	271
Expanding and improving public transportation such as bus, rail, vanpool, taxi, other shared ride transportation	7%, (20)	6%, (17)	15%, (40)	35%, (94)	37%, (100)	271
Addressing inequities in our transportation system, such as differences in who has access to more transportation options to access jobs, and services from different residential areas	9%, (24)	8%, (21)	19%, (51)	35%, (95)	30%, (80)	269
Improving the walkability of our communities	6%, (17)	10%, (28)	20%, (55)	34%, (91)	30%, (80)	271
Expanding and connecting bikeways suitable for people of all ages and abilities	8%, (23)	8%, (23)	21%, (56)	28%, (77)	34%, (94)	271
Maintaining and improving existing infrastructure (roadways, bridges, paths, sidewalks)	2%, (5)	6%, (17)	28%, (75)	41%, (112)	23%, (62)	270
Developing new ways to close the funding gap for important transportation improvements as gas tax revenue decreases	6%, (15)	10%, (27)	30%, (81)	38%, (101)	17%, (45)	271
Improving safety through roadway design changes, technology, and reduced speed limits	6%, (17)	15%, (39)	29%, (78)	28%, (76)	22%, (58)	272
Dealing with current and future traffic congestion as the region grows	10%, (28)	11%, (31)	27%, (72)	30%, (82)	21%, (58)	273
Developing technologies to improve traffic flow and safety, and support transportation options, such as e-scooters and on-demand ride services (taxis, Uber, Lyft, etc.)	13%, (36)	26%, (70)	35%, (96)	21%, (56)	5%, (13)	271
Accommodating automated/driverless vehicles in a way that improves safety and minimizes traffic congestion	33%, (88)	27%, (72)	20%, (53)	14%, (39)	7%, (18)	268



## Connect Greater Madison RTP 2050 Public Survey

### Other (please specify)

#### 34 Responses Received:

Intersection safety! Protected intersections are a must. Current MUTCD recommendations for bike lanes at intersections is terrible. Our best bike paths are only safe as the intersections they meet.

Many people who use electric and Hybrid vehicles are now paying a disproportionately high share of road costs with the current excessive wheel taxes. Road costs must be based on miles driven and vehicle weight, along with the mass of pollutants emitted.

Providing regional inter-city rail connections (e.g., Chicago, Milwaukee, Green Bay, Dubuque, Minneapolis, etc.)

Abort the BRT bus system plan. It's beyond stupid

We must deal with growth through improved public transit, not more cars and more roads.

Close State Street and make it a Pedestrian walkway

We spend a lot of time driving and not with our families and lives in this town. Until technology moves us to the next things, cars are the thing that allows us quality time in our lives. Please don't make it worse.

Safety over everything. And not using the word safety to expand vehicle lanes, or use the word to justify elaborate technologies with questionable returns. Geometric changes to roadways which improve safety.

When it comes to roads, maintaining is far more important than expanding

Increase affordable housing on the Isthmus and in Downtown areas of suburban cities so lower-wage workers can afford to live closer to their place of employment, reducing the need for vehicles or even mass transit.

Suburban sprawl (including affordable multi-family housing being built on formerly agricultural land on city outskirts is a major source of emissions and also forces low and middle-income residents to travel by car. Housing policy needs to restrict these developments. City parking policies and practices need to be restructures so as to discourage single-occupancy car travel and encourage alternatives to that kind of travel.

Remember a fiscal budget.

Madison is a great size for biking. Encourage this through all sorts of means, like more e-bike stations, paying people to bike, educating people on how they can save money by biking more and driving less, etc.

Reducing speed limits is of limited value. Much more important is street design and signage. And no distracted driving.

### Connect Greater Madison RTP 2050 Public Survey

Roads are expensive (\$30M for 1.5 miles of Fish Hatchery Rd?!?). Bike & Pedestrian paths are far greener and cheaper. Concentrate on transitioning urban and suburban residents to biking and walking.

na

Lower speed limits in urban areas!

If public transit, biking, and walking are convenient traffic and congestion will not be issues. We know from 50 years experience that building bigger roads just draws more cars.

Electric charging stations for bicycles and other vehicles. Bring back passenger trains.

We need to incentivise biking/walking/public transport and disincentivise car usage.

We have taken care of bikers And it's time to create the proper roadways for the growing traffic in this county. Most communities our size and many even smaller have loops around the city

Allow for the best transportation option--right now that is the automobile and probably will be into the future--so that people can go where they want to go when they want to go for maximum productivity.

reduced speed limits increases congestion and should not be done, roadway designs should be made to accommodate the current or higher speeds and maintain safety.

Please do not write questions that confound safety (extr. important) with reducing congestion (not important)!

More on focus on livable communities! Access to essential services and ways to access them beyond a car.

Institute a toll system for Illinois and out of state drivers

Every single transportation decision should focus on 2 things: VMT and safety. If it does not decrease VMT or increase safety (ideally both) then back to the drawing board.

Electric cars and automated driving cars are not the future. Cars are a very inefficient use of space, one that an isthmus city cannot afford.

Driving must be made less convenient. Regional transit could help change land use.

Plan the city as so it is not depend upon cars anywhere, and can be adapted to not have cars

De-incentivize single passenger private car use and ownership

The possibility of using smaller buses when economically feasible to expand coverage area.

Enforcing Weight Limits on Trucks as they are the real road Destroyers

### Connect Greater Madison RTP 2050 Public Survey

Increase passenger rail to regional destinations, for example Chicago, Dells, and Milwaukee

## Connect Greater Madison RTP 2050 Public Survey

Question 5: What else should we consider in long-range transportation planning, that you think will have a big impact on transportation and how people choose to get around over the next 30 years? (examples include changes in technology, roadway tolling, preferences for where people live and how they get around, expanded broadband wireless access, more remote work, etc.)

**Open-Ended Response****182 responses:**

Pathways and facilities for electric bikes

Change development practices to better allow more people to live, work, and recreate without having to travel great distances.

n/a

Putting public transportation, bicycle, and walking above all else. We cannot fix congestion with cars and car infrastructure. There's simply not enough space. And even if there was, it's dangerous and polluting.

More flexible parking structure passes for workers working a hybrid mix of in-office and remote employment (e.g. only in office two days a week)

More remote workers will drive the need for broad back accessibility

An intermodal station. It's insane that Dubuque has a fantastic one and we've got - a bus stop at Dutch Mill Park and Ride.

Expanded broadband access.

Urban design needs to continue to require greater density close to transit routes and bike paths. Then there need to be transit options that appeal to everyone living in those corridors. We need fewer acres of parking at office and campus destinations, and incentives for workers and students to get to their destinations without driving any kind of motor vehicle.

Train or metro system for Madison and vicinities. Free public transportation in the city. STOP building in the Isthmus area PLEASE!!!

Sprawl

Change zoning ordinances to allow more flexibility for single family property owners to construct and rent additional dwelling space in order to increase neighborhood population density.

### Connect Greater Madison RTP 2050 Public Survey

Tram or light rail system. Something faster and more predictable than the bus system so people aren't relying on cars and can live and work in two different communities.

Ideally, we could reduce transportation needs by providing the internet access necessary for people to work from home. Ride-sharing should be promoted more. Flex hours should be encouraged more. Both would reduce traffic congestion. Better bus routes/service would also reduce traffic congestion. Along with that, though, we need on-line access to the information on bus routes - i.e. fastest way to get from point A to point B and where and when to catch the bus.

Focusing on improvements that mean fewer individual vehicles are on roadways and so fewer roadways are needed and used - how can roadways be used, maintained, and reclaimed as valuable public space?

#### USE THE EXISTING RAIL NETWORK

Raise taxes on gas, create or utilize taxes on new car purchases to fund infrastructure, implement smart traffic signaling that preferences buses, bikes, and pedestrians, provide lower cost housing options spread over a broad area to make it easier for lower income people to live closer to their jobs

Add sidewalks in communities that have none to encourage walking over driving. Prioritize public transit and bike/foot travel over cars. My neighborhood has no sidewalks. It's very dangerous.

Driverless cars will increase congestion and VMT unless something is actively done to keep that from happening...do something to keep that from happening.

If people working in Madison don't want to live in Madison then I'm not concerned about how they get to their job. I've grown frustrated with out of townworkers complaining about how long it takes them to get to work, or their schools are closed because of the weather so they have to stay home.

Reward people who use low-carbon means of transportation or tax those who don't.

regional rail

encourage driverless cars as technology allows

Safety of vulnerable road users from larger vehicles, especially as personal vehicles continue to get larger and larger.

Parking spaces are bad and don't need to be everywhere. Parking spot policy is a transportation issue. They make neighborhoods unwalkable and unbikeable.

Kinetic sidewalks and rail. Way overdue.

Madison will need to build a lot more housing. That housing needs to be dense and densely served by public transit to avoid more cars and more congestion.

Education about how to use transportation options to reduce personal footprint/climate change. Many people who know that climate change is a real thing have not stepped up to make changes in their personal lives. For instance, how to use the Metro system and the benefits of taking the extra time that that may require.

I'd like to see the business community engage in the health of our transportation system as critical to their resiliency.



## Connect Greater Madison RTP 2050 Public Survey

Kinetic sidewalks and rail. Way overdue.

Denser living to help support public transport needs.

Expanding broadband is very important and I would add that having faster internet in Madison with different providers to keep the cost down would be very helpful as well. I would VERY much like to have regional light rail for transportation between other areas in WI and surrounding states.

Close State Street and make it a Pedestrian walkway. This city does not need Buses down state street. Short sightedness is causing tax loss by the powerful lobby group that is advocating for buses that no one will use on State Street.

Emphasize development of RAIL between major cities (MKE, MSP, CHI) and BRT within our city. Anything to reduce cars.

Mitigating and adapting to climate change should be THE No. 1 priority from here on out.

not an expert

North Beltline.

Greater options for public transportation to major cities, eg Twin cities/Chicago

Socioeconomic impacts on transportation needs based on where lower income people are able to live and need to work. Needs for expansion of broadband wireless access. Use of greener technologies.

The fundamental goal of the Long-range transportation plan should be to reduce overall VMT in private automobiles (regardless of the fuel source) and the reduce every year the total lane miles of paved roads. The LRTP should self-consciously be designed to reduce automobile usage overall.

connecting the Burbs to Madison proper

Telework, carbon tax

Regional transit network and regional bike networks. Cities should be connected by transit and bike facilities as well as they are for people driving

More support for broadband for low income households, encouraging employers to shift to workers to one day remote work per week to reduce traffic congestion, increase gas taxes and return the revenues to households.

Smart growth, incentives to bike/walk/bus to work/school, allocating funds specifically for bike/ped projects (Minneapolis does this), make it more challenging/expensive for driving single person cars and easier to bike/work/bus.

None

Easier access to transit in urban, suburban and rural areas, make parking downtown less of a priority so that people choose transit instead of driving. Connecting transit lines to intercity stops and actually having rail as an option for travel.

### Connect Greater Madison RTP 2050 Public Survey

I would like to see on street parking removed on a broad scale, and the cost of parking increased. It's practically free to park in a ramp downtown. Why are we footing the bill for people to store their property in public facilities.

Na

Embrace new technology early

Housing affordability directs where people live and this where people have to commute to work from. The transportation plan should also take this into consideration.

I think more will come to the area and bring diversity, especially as remote work becomes more common. The schools are important to keep highly ranked, which would be improved by expanded wireless access, public transportation, ride share, etc.

Expand high speed internet access

Build the north Mendota Bypass and the new new south belting corridor.

High-speed rail service to Milwaukee, Minneapolis, Chicago. Expand broadband wireless and make it more affordable (it should be like electricity).

Encourage/reward businesses that allow remote work. Significantly increase tax incentives/rebates for electric vehicle purchases and other green alternatives like solar panels. Incentives/rebates for e-bike purchases (many drive because they can't bike that far to work but could bike if they had the boost an e-bike provides, eliminating another car from the road).

I've turned down jobs in areas outside of Madison solely based on transportation. Would be nice to have public transport (RAILWAY) to areas. I love that we can drive to Milwaukee and take the rail to Chicago. We know lots of people that do that often. Wish we had that from Madison.

Vehicle technology, especially electrification of vehicles and connected and automated vehicles

No tollways! Increase fees on electric vehicles - they are heavier and take a bigger toll on roads per vehicle and do not currently pay any gas taxes

Expand wireless access; Encourage remote work; Add roadway tolling for inter-city car travel; Increase the number of EV charging stations; Add dedicated bike and e-bike lanes on highways; Prioritize bike and scooter parking over car parking; Reduce the amount of city-owned land dedicated to car parking and increase the cost of car parking; Prohibit car travel on an increasing % of main corridors and offer free shuttles in these corridors; Stop building on agricultural land on the outskirts of town and continue the push toward thriving and dense city centers; Foster EV car sharing businesses; Establish and expand EV van services; Establish better rules for ensuring the safety of bicyclists, scooter-riders, and pedestrians; Establish a transportation safety corps that is not the police which is charged with enforcing safety for travelers; Require Traffic Demand Management Policies for all large buildings

Finding ways to reduce VMT (or minimize VMT growth) as the region grows.

A balance budget bipartisan government election integrity.

Make it less convenient to drive, more convenient to bike/bus/train, etc.

## Connect Greater Madison RTP 2050 Public Survey

Open road tolling

increased telework

ConsiderShweeb: <https://en.wikipedia.org/wiki/Shweeb>

Better educate bicyclists on the rules of the road. Keep E-Bikes and all bikes, off the sidewalks!!!!

Finally accept that induced demand is a real problem and stop expanding freeways and multi lane highways throughout the region.

Should enact policies that increase the cost of driving and incentivize methods of transportation that do not rely on fossil fuels.

Prioritize accessibility to the most environmentally friendly transportation such as walking, biking, and public buses. Also, lowering prices of public transportation, and increasing infrastructure that isn't designed only around cars.

Again, ideally things should be set up in such a way that people can easily walk anywhere they need to go.

By de-funding car infrastructure in favor of enabling easy access to the city's destinations via (e)bikes, (e)scooters, and walking, we can save enormous amounts of money while also significantly reducing our contribution to a worsening global climate. We can also re-claim half or more of our parking lots for new businesses to increase our tax base.

Making it affordable and desirable to live close to work and needed services, as well as increasing remote work.

residential costs are pushing more people outwards causing increase traffic. There's a lot more people commuting towards madison or across madison because of housing pressures. Managing the housing situation could help relief the growing commuting issues

No one uses buses here - improve car transport

Changing demographics in family structure, age, economic means, of citizens.

Cars aren't going away. People outside of Madison are actively choosing to get away from things like buses, and bikes are not viable for long distances. Stop trying to push people out of cars!

na

Expand capacity

Rail service to address roadway congestion

My husband has worked in paving for 26 years and said a huge problem is that they desperately need people to learn how to pave roads. Since we live in Wisconsin, their season of work is usually from May to November. The hours are long and the work is serious, but a lot if drivers are retiring and they can't find people to work on road construction anymore. The roads in Dane County are terrible, especially Hwy V in DeForest and 113 into Waunakee. I think we need to

### Connect Greater Madison RTP 2050 Public Survey

understand that Dane County will always continue to grow and expand and we need to have a forward vision. Trains or light rail are great options and are economical friendly. I think Madison gets a little too caught up on their image and that inadvertently hurts the lower income folks of the city. We need better bus service and more reliable transportation for this group of people. They're not the ones biking around the lake on their Trek bikes. I grew up in Madison, rode the city busses from middle school through high school and biked around the lake. I remember when the "new" belt line opened in 1989. I think the city has outgrown a lot of their roads and needs to double down on that again. It's hard to have a city on an Isthmus, but we need forward thinking now.

Public transportation options from surrounding communities into Madison proper

N/A

Expanded broadband for remote working. Improving a route along the North side of the region.

Prepare for automated/autonomous vehicles

Carbon tax on gasoline. Per-mile-driven registration fess.

Definitely broadband access. It allows companies the options to let worker work remotely thus less cars and congestion on the roads.

Madison is consistently known at a bicycling hub, and this is what attracts young people and encourages a healthy & sustainable life/transport. I would love to continue to see the path infrastructure grow to increase ridership.

Forget tolling. On arterial streets and highways forget lowering speed limits. Reasonable speeds are needed for arterials to function as they should. Minimize use of highway funds for non-highway uses. We already don't have enough highway funds to properly maintain our highways. Don't divert them!

Issues related to aging populations and expansion of transportation resources aligned with geographic areas of population growth

Green space is very important

Not sure

Prepare for much more electric auto & truck movements, parking, and recharging vehicles

Promote and encourage and reward remote work. Have the people who drive alone and park alone pay for what that REALLY costs. Privilege costs.

Public bathrooms, safe ones. Safe places for bicyclists and pedestrians when storms arise.

Voluntary work from home days to reduce traffic strategically

Midwest rail! -- get connected to Chicago, MKE, Twin Cities, Fox Valley.

I think there will be a rise in personal electric transportation (electric scooters, skateboards, bikes etc.)

The Loop around Madison is most important

### Connect Greater Madison RTP 2050 Public Survey

More urban fill in with full service communities--housing, retail, work--to decrease vehicular commuting

Add more bike-shared roads. Add more bicycle paths. Add back street parking in downtown Madison.

With an aging population, consideration of transportation options that encourage independence, safety, and ease of use for seniors no longer able to drive is important in supporting normal activities.

Add more electric charging areas. Expand bicycle/walking paths. Add a commuter train to/from Milwaukee and Madison. Add free parking to downtown Madison.

biggest change needed is a transit system within Fitchburg to cover more areas with a greater frequency than the Madison Metro System

Implement technologies such as driverless cars especially for long-distance and heavily traveled routes using current roadways. New roads built with such capacity. Recognize that the majority of people want their own vehicles which give maximum flexibility and allows for maximum productivity.

definitely more and cheaper broadband access; work at home incentives or shared office spaces in apartments/public buildings if parents can't work at home but could work from a location close to home.

Railroad availability and connections/service.

Broadband access for rural areas.

Do not reduce speed limits, that increases congestion. Redesign roads for safety and higher speeds.

We need a better bikeway to get to the UW campus from Fitchburg and other points south.

Remote work and automotive technology

shortening public transit time-to-destination for major routes increase park-n-ride locations and public transit service to park-n-ride locations

Definitely need a second Beltline at Co Rd M for all the great expanse of the suburbs south of downtown

Better options for transport to local airport

Trying to "fix congestion" by adding more capacity to the highway system and road network is a losing game and a giant waste of taxpayer dollars. By adding more capacity you will only encourage more people to drive more miles and still end up with a similar or worse situation with regards to congestion. For examples of this phenomenon in the wild consider Washington DC and Los Angeles.

Promote zoning to reduce urban sprawl that contributes to transportation problems

How congestion is addressed has a big impact on my answers. If it's be expanding roads, forget it. Getting businesses to stagger work hours and rely on remote work then yes please. Also make traffic lights smarter to reduce fuel usage.



### Connect Greater Madison RTP 2050 Public Survey

Climate change is causing road buckling in other areas. Should reduce reliance on roads (and also reduce emissions)

Looking at the big picture when addressing traffic. Don't just look at one section and improve that without looking at what it connects to and if your spending money expanding one roadway to just cause an issue somewhere else. Think about avoiding adding more impervious surfaces near the lakes. There are much better ways to handle things AWAY from the lakes!

Support greater housing density and oppose new sprawling developments.

Less free parking, more room for kids to play in the streets, rail options from/to Madison from/to Sun Prairie/Verona/Fitchburg/Milwaukee/etc

Induced demand - if the city is constantly making infrastructure improvements that cater to greater and greater numbers of car drivers, people have no incentive to explore other transportation options. So far, Madison has made it so that driving a car is the safest and most reliable transportation method, so most people with the means to choose will choose to drive a car.

Making sure any new development or redevelopment includes good access to public transportation and alternatives to personal vehicles. Designing infrastructure for a post-fossil fuels future and building communities that are not car-dependent. Expanded broadband wireless access, particularly in rural and lower socioeconomic areas, is imperative.

n/a

Na

nothing to add

north beltline local rail service other cities rail service A Darn greyhound station for bus service to Milwaukee etc.

After Vision Zero, climate protection is job one! We must stay home, if necessary, to protect it. Active transportation, not EVs!

more low income housing in accessible areas, so if the land is too expensive build the infrastructure to support residents to get fast to employment, food purchases, etc

As our neighborhoods become more dense and traffic increases we need to make our streets safe for all types of transportation. Especially biking and walking. The number of cars speeding and running red lights as traffic increases pushes these safety hazards onto bikes and ped. Aggressive driving needs to be mitigated by better road design and enforcement

Getting younger generations and people of color involved in the discussion. Senior citizens should not be the only voices in the room or transportation professionals. Stay away from tolling that is an income barrier. Post covid, keep in person public involvement. Virtual should be an add on, not the new way of doing business.

Building to promote biking and public transit

### Connect Greater Madison RTP 2050 Public Survey

Stop inducing demand; no more expansion. Focus on transportation alternatives - continued expansion only encourages (subsidizes) sprawl in the metro area.

People who live a distance from work need to accept what that choice means. Don't put costs of roads on those who don't commute or live driving cars. Wheel tax is not fair. Tax the parking spaces used by commuters

Safety and accessibility during the winter months and inclement weather

Change zoning to encourage density. The fifteen minute city can be a reasonable goal.

Increased density as people seek out walkable communities creates opportunities to prioritize pedestrians and de-prioritize single-occupant vehicles.

Expanded wireless broadband, more remote work, subsidies for fuel efficient vehicles, subsidies for solar or other sustainable energy infrastructure, free gifts/incentives for citizens to bike commute, glowing bike paths, free bike lights/helmets for low income families

Light rail, rapid bus service and expanded broadband

High speed and commuter rail

Use of cell phones while driving. Look at drivers nowadays, everyone's on their phone. It's dangerous to be on on the roads or sidewalks these days.

I like tolls as a user-tax to generate funds to improve bike paths/roads/walkability/public transit/etc.

Public transit, non motorized transit, and toll roads for Illinois drivers

I support bus transportation to outside of city but not at the expense of ever-expanding paving and suburb building on farm land

The biggest impacts on transportation would seem to be (1) how it's planned (people will tend to adapt to what's easiest for them), and (2) growing inequities in income and transportation mode options.

better land use

Climate change is already here, so everything should keep that as the focus. We need to decrease VMT, and decrease paved surfaces that increase the heat island effect.

Cars should become less central is urban design

Payment methods - implementing some sort of vehicle fee based on miles driven and weight would better fund road work by those who use it most and cause more wear (eg big trucks) and incentive vehicle owners to drive less (hopefully walk or bike or carpool or bus more).

likelihood of increased flooding, limiting impermeable surfaces

make transportation planning just one part of a larger systemic, holistic planning process that includes housing, jobs, entertainment, equity, etc.

## Connect Greater Madison RTP 2050 Public Survey

Inter-city mass transit.

Rail. Regional rail.

Improve rural internet access.

Land use policy to support transit, walking, and biking.

Congestion pricing for the isthmus; creating car-free corridors in Madison

Building complete neighborhoods with access to goods and services by foot and by bike.

1. Build a North Mendota Parkway corridor that addresses many issues on the north side of Lake Mendota besides connecting communities, like protecting agricultural lands, bike and ped facility links, stormwater quality and quantity reduction and lake runoff effecting lake levels, and transit options across the north side from DeFo/Waunakee/Northeast Madison/Sun Prairie/American Family to West Madison/Middleton/Verona/Epic.

environmental impacts of types of transportation

aging populations and desire for continued mobility. autonomous vehicles

Making walking and bike riding safer--more bike and pedestrian corridors that are safe and pleasant to use and less catering to speeding automobiles. Make city driving the least appealing option--getting people out of their cars for their commutes is essential.

Reduce reliance upon single occupancy vehicles through increased mass transit and non-car options, and encourage greater residential density in madison and surrounding areas.

A congestion charge would be great. Electric cars are still cars that kill people and neighborhoods (via parking lots), so don't focus too much on those.

Focus on both commuter and non-commuter public transport use, because if a non-commuter can easily use the system to get where they want it should be sufficient for a commuter

Use transport as a mechanism to control future population growth in ways in which prevents/heavily disincentives sprawl, and encourages increased density. Make the city fully functional without cars.

Redesign neighborhoods so people can get to retail, food, work, etc. without a personal car. Use zoning or etc. to demand basic services be available within 1-2 miles of most every home, or easily accessed with BRT. Encourage infill and penalize monoculture housing developments.

Expanded Broadband access to support more remote work and decrease car traffic

Expanded broadband access, more remote work, more public transit, electric charging stations to encourage electric vehicles.

Transit or railway possibilities

### Connect Greater Madison RTP 2050 Public Survey

considering the needs of older adults--you act like everyone in Madison is young and most are not, try to get some reality orientation will you? like: you think older adults need better bicycle pathways? your question about says improve bicycle pathways for all ages and abilities--you don't realize that many people older and with disabilities CANNOT AND DO NOT RIDE BICYCLES?!?!?!?!?!?

Incorporate possible bus stops in new neighborhood construction.

Top priority: make sure all city and county roads are well maintained and not like they are today. Make sure hybrid and electric vehicles are paying their fair share for road maintenance.

The number of companies allowing employees to work remotely (and sizes of each)

Believe that there is something called 'induced demand' and act accordingly. That is, do not deny reality. Believe in data, evidence and science.

Self Driving Vehicles need to be accommodated. They will be saver, more efficient, take up less parking space, permit narrowing of traffic lanes and far less a generator of pollutants.

Make the roadways ready for automated vehicles when they come onto the roads. That is going to be needed in the future. Improve passenger rail to nearby regional destination. With automated cars, people may use these to get from city to city and have automated vehicles take them to their local destination.

With the increase transition to autonomous vehicles, this will likely have many ripple effects to society, in addition to the obvious safety and efficiency benefits. For example, this may lend itself to vehicles being owned by private fleets rather than individuals, which could need for less need for parking where people live, but parking facilities to park the vehicles in off-peak travel times. In addition, if private autonomous vehicles are readily available this could also lead to a decrease need for traditional transit.

Roadway tolling will capture the external costs of driving. Climate change is an existential threat and should have top priority. Should be reflected in you planning documents and future agenda!

Remote work incentives, parking availability and costs in the downtown area for commuters

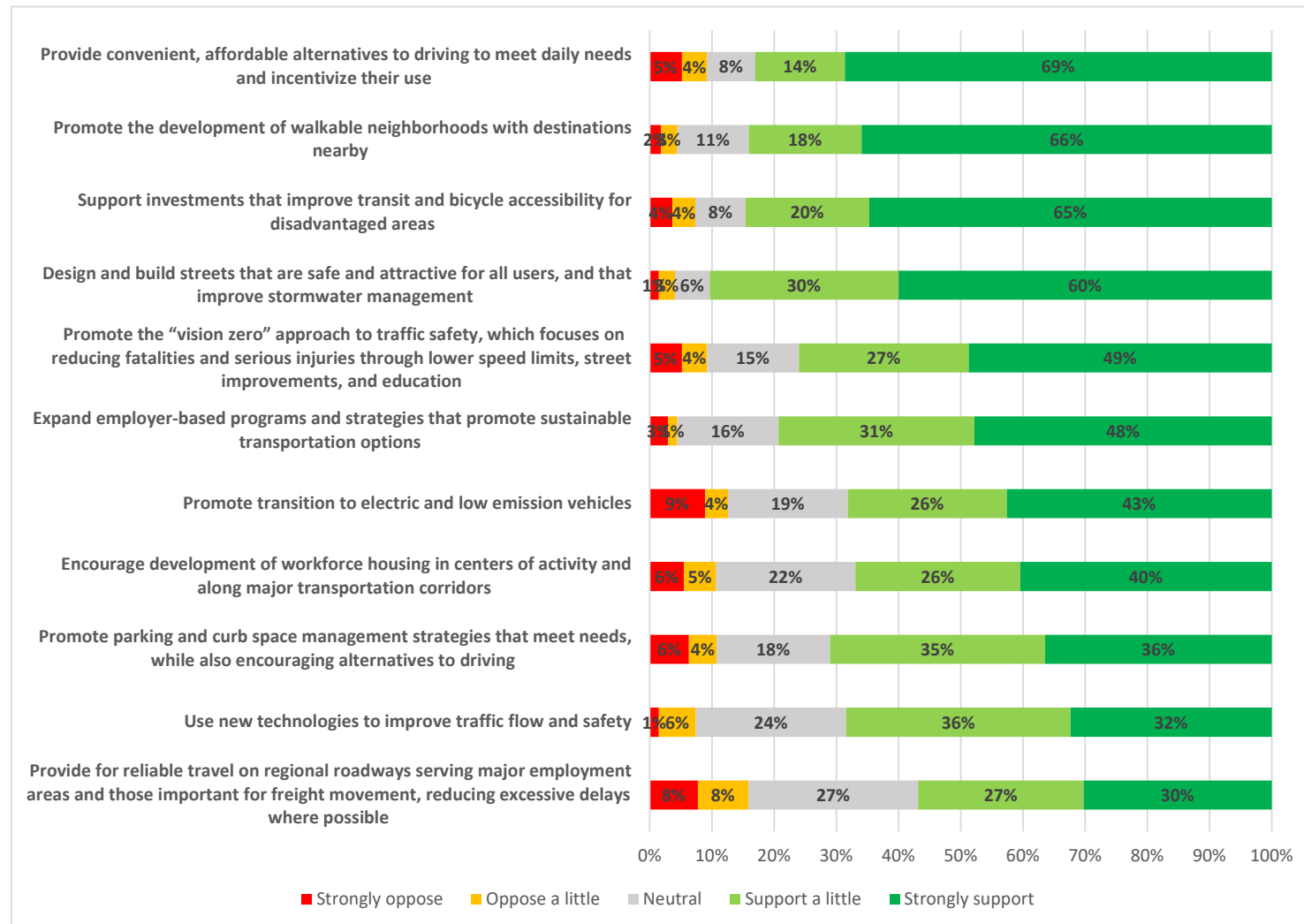
Eliminate vehicles using gas and more emphasis on electric vehicles, expand broadband wireless access and control its current high expense. Hybrid work & higher education. Improve city Parks.

None

It looks like you have it covered

## Connect Greater Madison RTP 2050 Public Survey

## Question 6: How strongly do you support the following policies and strategies for improving the region's transportation system?



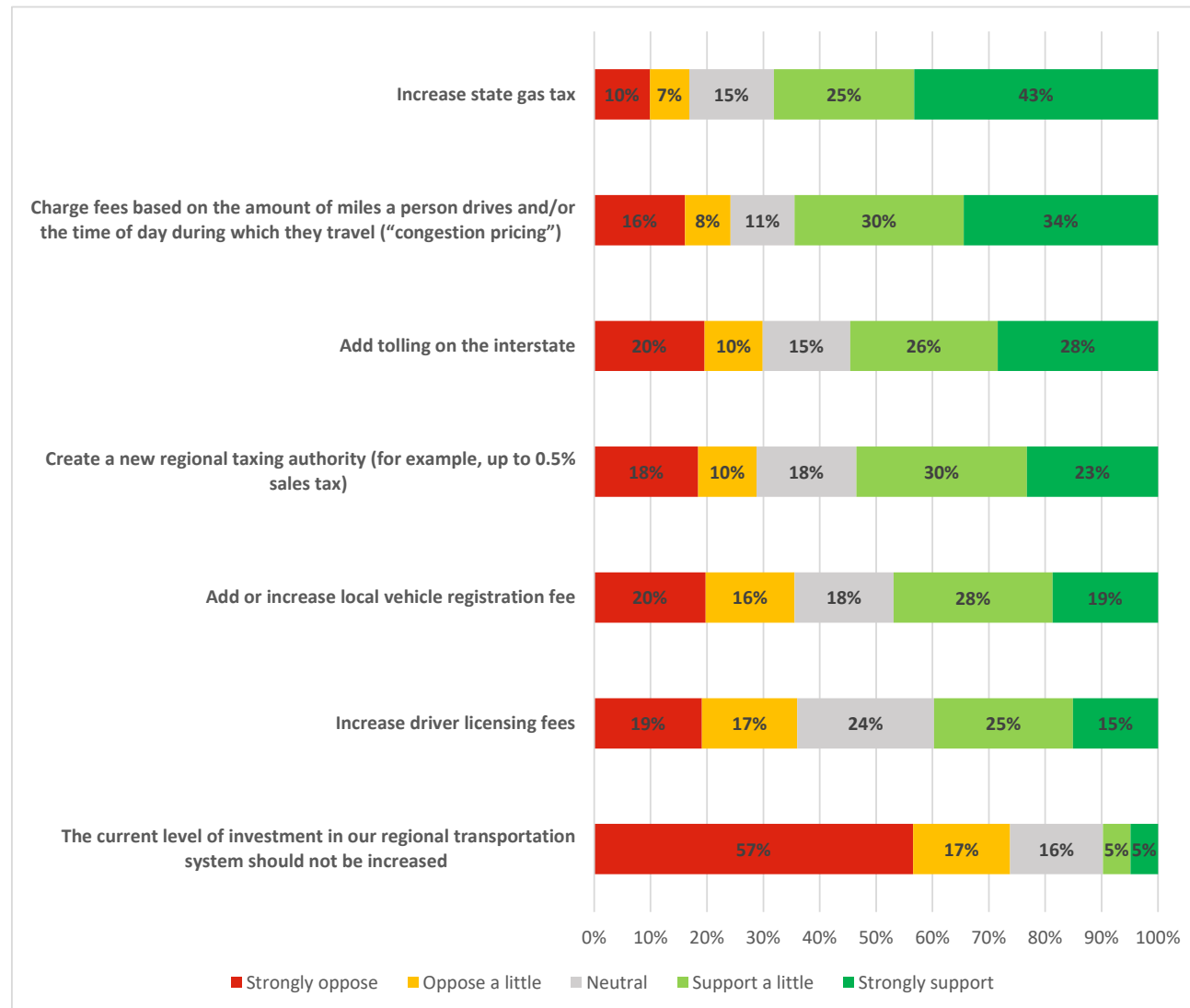


## Connect Greater Madison RTP 2050 Public Survey

Answer Choices	Strongly oppose	Oppose a little	Neutral	Support a little	Strongly support	Grand Total
Provide convenient, affordable alternatives to driving to meet daily needs and incentivize their use	5%, (14)	4%, (11)	8%, (21)	14%, (39)	69%, (186)	270
Promote the development of walkable neighborhoods with destinations nearby	2%, (5)	3%, (7)	11%, (31)	18%, (49)	66%, (178)	272
Support investments that improve transit and bicycle accessibility for disadvantaged areas	4%, (10)	4%, (10)	8%, (22)	20%, (54)	65%, (176)	272
Design and build streets that are safe and attractive for all users, and that improve stormwater management	1%, (4)	3%, (7)	6%, (15)	30%, (82)	60%, (162)	271
Promote the “vision zero” approach to traffic safety, which focuses on reducing fatalities and serious injuries through lower speed limits, street improvements, and education	5%, (14)	4%, (11)	15%, (40)	27%, (74)	49%, (132)	269
Expand employer-based programs and strategies that promote sustainable transportation options	3%, (8)	1%, (4)	16%, (44)	31%, (85)	48%, (129)	270
Promote transition to electric and low emission vehicles	9%, (24)	4%, (10)	19%, (52)	26%, (69)	43%, (115)	270
Encourage development of workforce housing in centers of activity and along major transportation corridors	6%, (15)	5%, (14)	22%, (61)	26%, (72)	40%, (110)	270
Promote parking and curb space management strategies that meet needs, while also encouraging alternatives to driving	6%, (17)	4%, (12)	18%, (49)	35%, (93)	36%, (98)	269
Use new technologies to improve traffic flow and safety	1%, (4)	6%, (16)	24%, (65)	36%, (97)	32%, (87)	271
Provide for reliable travel on regional roadways serving major employment areas and those important for freight movement, reducing excessive delays where possible	8%, (21)	8%, (22)	27%, (74)	27%, (72)	30%, (82)	271

## Connect Greater Madison RTP 2050 Public Survey

## Question 7: How strongly do you support the following options to increase funding for the transportation priorities that matter most to you?



## Connect Greater Madison RTP 2050 Public Survey

Answer Choices:	Strongly oppose	Oppose a little	Neutral	Support a little	Strongly support	Grand Total
<b>Increase state gas tax</b>	10%, (27)	7%, (19)	15%, (41)	25%, (68)	43%, (118)	273
<b>Charge fees based on the amount of miles a person drives and/or the time of day during which they travel ("congestion pricing")</b>	16%, (44)	8%, (22)	11%, (31)	30%, (82)	34%, (94)	273
<b>Add tolling on the interstate</b>	20%, (53)	10%, (28)	15%, (42)	26%, (71)	28%, (77)	271
<b>Create a new regional taxing authority (for example, up to 0.5% sales tax)</b>	18%, (50)	10%, (28)	18%, (48)	30%, (82)	23%, (63)	271
<b>Add or increase local vehicle registration fee</b>	20%, (54)	16%, (43)	18%, (48)	28%, (77)	19%, (51)	273
<b>Increase driver licensing fees</b>	19%, (52)	17%, (46)	24%, (66)	25%, (67)	15%, (41)	272
<b>The current level of investment in our regional transportation system should not be increased</b>	57%, (151)	17%, (46)	16%, (44)	5%, (13)	5%, (13)	267
<b>Increase local property tax</b>	26%, (98)	21%, (56)	20%, (53)	19%, (50)	4%, (12)	269

Other (please specify)

61 responses:

### Connect Greater Madison RTP 2050 Public Survey

With the current local wheel taxes (city and county), combined with the penalty against hybrids, I am already being overcharged for vehicle registration. The VMT concept is flawed because (1) it doesn't distinguish between in-state and out-of-state travel (i.e., as a Wisconsin resident, I would get charged extra for miles I drove in Minnesota rather than Wisconsin, yet a Minnesota resident could add to the wear and tear on Wisconsin roads without paying through the odometer, and (2) odometer surveillance is a civil liberties violation against a person's fundamental human right to privacy. Funding should instead be through a higher fuel tax and a WEIGHT based registration fee to reflect that less efficient and heavier motor vehicles inflict more damage to the roads and air quality.

Stop raising taxes and fees.

We need regional, equitable funding that ideally places the burden of cost on the most inefficient road users (cars).

I don't mind paying taxes, but increasing taxes in the cities just pushes people out who hate "gubmint" - and they end up using our roadways anyway.

A late work colleague of mine promoted mileage fees and congestion pricing for many years, and was derided by WISDOT, WDNR and legislators. I'm glad to see that you are including this option as a means to discourage lots of the wasteful driving we are suffering from today.

The people who use the roads and the vehicles who wear down the roads the most should pay the most for road maintenance/improvements. I'm not sure how that is easily accomplished.

Tax new car sales? Wheel tax? Tax electric vehicle charging (but not nearly as much as gas)?

Should be able to charge market rate for curb side parking.

Wisconsin needs to produce electricity in climate-friendly ways soon.

The vast majority of current infrastructure is roads, so therefore all tax increases should be placed on operators who place burdens on the road system (ie - cars and trucks)

Honestly, if our property taxes are increased any more, I would consider leaving Madison entirely. We have a HUGE property tax burden as is.

Close State Street to busses and make it a Pedestrian walkway and then stores will come back and therefore an increase in Tax revenue will be realized and can be used for this.

Find solutions that do not disproportionately affect persons who must drive (due to low access or low quality public transport) with greater burden on commercial traffic.

This is all killing off middle-class people who just want to work and go home. Don't PROMOTE things. Provide city services and let us decide what features we use.

There is a real cost to driving cars. That cost should be passed on to drivers, not subsidized by the state.

### Connect Greater Madison RTP 2050 Public Survey

I think that road infrastructure for private cars should receive less subsidization from other revenue sources and be fully supported by users. This will require massive increases in tolls, gas tax, registration fees, or other user fees. I would like to see this happen in a manner that is not regressive or onerous towards poor people, e.g. registration fees graduated based on vehicle value or exempted below a certain vehicle value or personal income, etc...

This area is insanely expensive to live in and we keep getting slammed with increases in pricing. I find it hard to want to support further increases, even though they clearly need improvement over time.

Use current dollars to maintain system and don't spend on fringe items.

Increase the cost of parking; single occupancy home owners should pay a LOT in order to park their vehicles on on city property (the street\_ instead of in their garages/driveways.

Strongly support a good teen center built into a deserted fire station in Fitchburg.

Increase income tax. To address inequity, transportation funding should be based on ability to pay. To address climate change, gas tax should be increased. Oppose tolling unless toll collected only at entry to State of WI. Also oppose tolling near metro areas because it diverts traffic to local roads.

Stop dis-incentivizing people who choose a more sustainable transportation option (e-car).

It's important for me to clarify that I support raising property taxes specifically on very wealthy homes. I think people living in Shorewood or the person in the huge mansion across from Dunn's Marsh on Seminole Highway should absolutely pay more property taxes. Normal people in regular and reasonable houses are paying a fine amount. It's the rich people we should tax because they not only have the funds, but will also only hoard that money if untaxed rather than putting it back into the local economy.

By removing the need for transportation by car within our urban and suburban areas, and re-claiming parking lots for new businesses, we will simultaneously decrease our need for transportation-related funding while increasing our tax base.

na

Tax the wealthy in this state!! Also, toll roads at the Illinois border! Every weekend our interstate is clogged with Illinois drivers!!

Shift funding to transportation from other parts of the budget. Local taxes are already too high and revenue is already sufficient to do the necessary work of local government. Eliminating Public Health of Madison & Dane County would be a good start to fully funding needed transportation.

Tax the rich!

Personal opinion is strongly favoring a gas/fuel tax to incentivize sustainable alternatives and reduce congestion. It is a proven solution that meets multiple initiatives and taxes the root of the issue (high usage of gas powered cars).

Insufficient data and context



### Connect Greater Madison RTP 2050 Public Survey

Add revenues from persons receiving tickets from transportation processes, e.g., driving type (speeding) tickets, illegal parking tickets, etc. Also, encourage park-n-ride lots near main traffic corridors.

All of these options are somewhat regressive. I would like to see a progressive tax option, like vehicle fees based on vehicle value, or income tax. Even property tax can be regressive because it gets passed on to renters.

Environmentally friendly transportation should be taxed less than environmentally destructive transportation.

Make bikes pay for registration. How much has been spent on bike paths that come out of the transportation budget while bikes pay nothing!

Income tax based funding, where higher income bracketed indivs pay more. A lot more.

Most people travel by car please accommodate the increased traffic

Transportation and infrastructure cost money. We should be willing to support the benefits through collective actions to include following traffic laws.

The last statement on not increasing investment in RTS is confusing and should be extracted - previous statements are better

Simply increasing local property taxes in Madison will likely make housing in the city even more unaffordable for low and middle income people and encourage migration to the suburbs while increasing overall commuter miles driven. I would strongly support Madison repealing local property taxes and replacing them with a land value tax. Switching to a land value tax would incentivize more efficient land-use decisions on a micro-level by encouraging individual property owners (from large developers to single-family home owners) to make the most productive and efficient use of their property, thereby increasing the housing affordability and reducing transportation infrastructure costs on a per-capita basis.

I don't know enough about tax policies to know which are least regressive, but I support taxes that impact low-income residents less. I have read that sales taxes are regressive, and maybe gas taxes? I support increasing taxes to spend on transportation infrastructure. That's what governments are there for.

Tighten the belt by eliminating administrative bureaucracy. Take a pay cut. Eliminate feel good do nothing positions.

Support increased fees on drivers, taxes, etc. - but not confident the money will be appropriately spent (e.g. our wheel tax dollars apparently helping to induce further demand on the Beltline with current project under construction).

Increase fees and taxes on trucking businesses and heavy automobiles, as it is their heavier weight that is contributing to road deterioration.

Tax or fees based on size of vehicle

We need revenue to accomplish all the above. How to raise fees above and not disadvantage lower income workers?

charge fees based on vehicle weight.

we should charge people not just based on how much they drive but alternately, how heavy their vehicle is. Massive SUVs and F-150s have much more wear and tear on roads than lighter sedans.

### Connect Greater Madison RTP 2050 Public Survey

Distributors and freight companies should pay more to travel through Wisconsin

Use of advertisements to offset cost

Any flat tax or fee disproportionately affects lower income people. This needs to be avoided.

Don't use a sales tax.

Create a surcharge area in downtown madison in which you are charged for driving in, as per London, Copenhagen(?), and the other european cities with similar schemes

Increase price of gas by whatever means possible to at least European prices. Have owners/drivers of private cars really bear the costs of their driving.

Get rid of waivers for farm and other heavy equipment users of roadways, vehicles doing the most damage to the roadways should pay the most for upkeep, like question 6 here.

stop the big spending, I strongly oppose this kind of so-called "regional planning"--the legislature should make the decisions about money that is spent on transportation, not planners!

Tolling specifically for non-Wisconsin plate vehicles on interstate and Beltline. WI plates are exempt.

Parking cashout can benefit everyone

What we don't need are \$750 million or more spent on highway improvements (Verona Road). What we do need is a mind reset from auto centric to all forms being equal including bring in scooters, bike cages, BRT, high speed trains, and maybe commuter rail. WE need to thank TREK for the electric bikes.

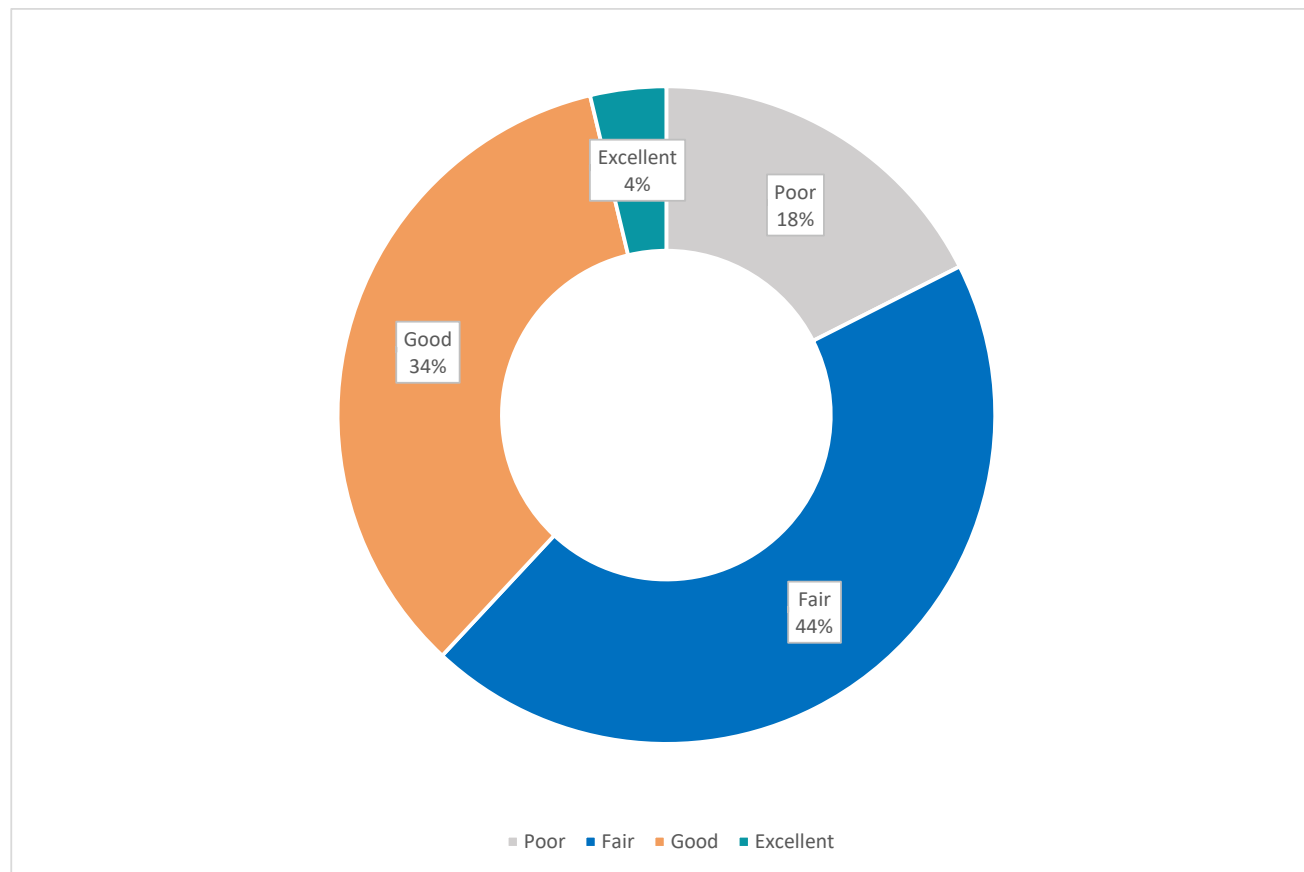
The cost must be aligned with usage and we can't mix in incentives for the types of vehicles (ie lower costs for electric or hybrid vehicles) as part of the plan. It may actually be that these alternative vehicles are not "paying their share" currently through the gas tax, so increased registration for these vehicles to balance out the usage costs may be necessary. Also consider increased registration fees for Autonomous vehicles before they become popular, so that as there is equal potential for them to potential reduce OR increase congestion, that we can capture revenue from them accordingly.

Need to find a way to increase revenue for transportation needs that do not decrease travel for people.

Just a comment: The last question appears poorly worded considering the answers.

## Connect Greater Madison RTP 2050 Public Survey

Question 8: How would you rate the performance of the greater Madison region when it comes to planning and preparing for growth in the region?



## Answer choices

## Responses

Poor

18%, (47)

Fair

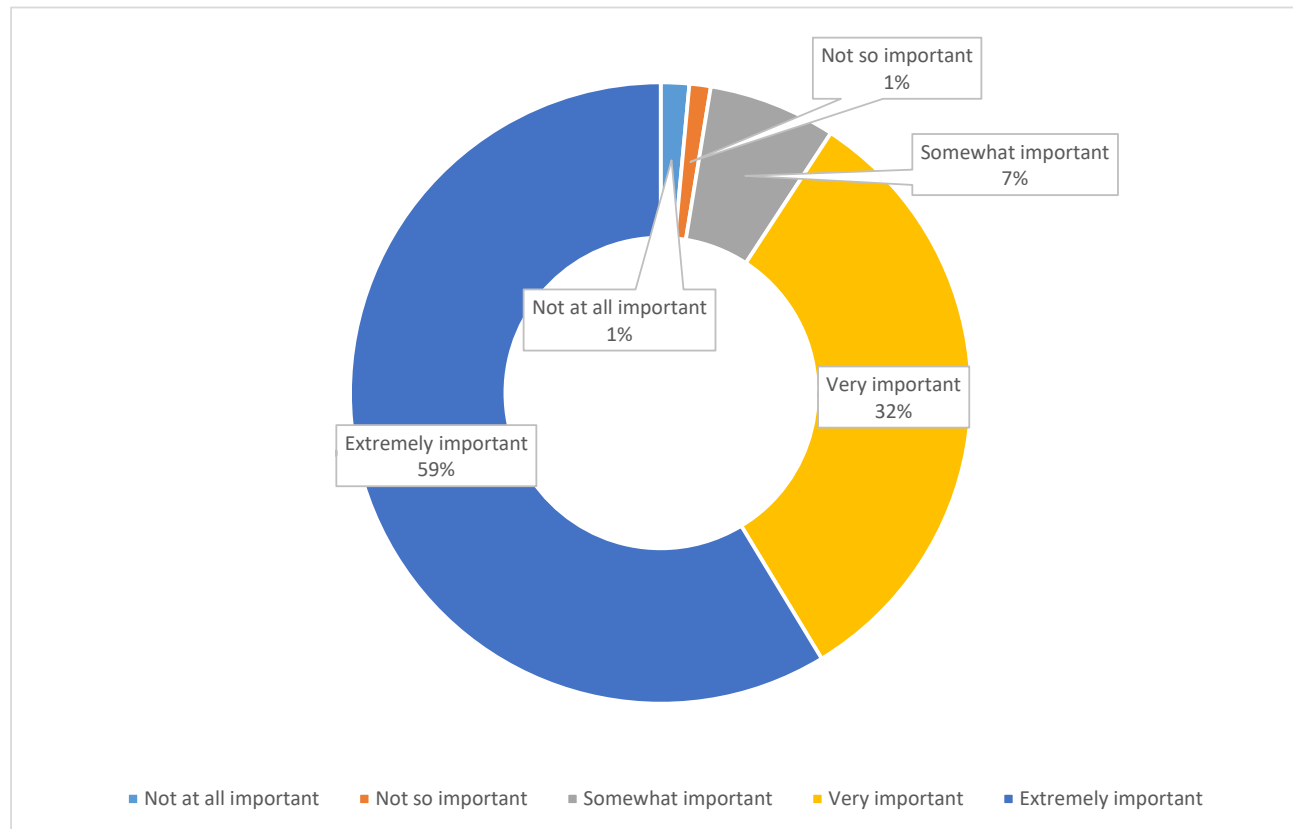
44%, (119)

Connect Greater Madison RTP 2050 Public Survey

Good	34%, (92)
Excellent	4%, (10)
Grand Total	268

## Connect Greater Madison RTP 2050 Public Survey

Question 9: How important is it that the greater Madison region has a vision or a long range plan to deal with transportation issues?



Answer Choices	Response
Not at all important	1%, (4)
Not so important	1%, (3)
Somewhat important	7%, (18)
Very important	32%, (87)

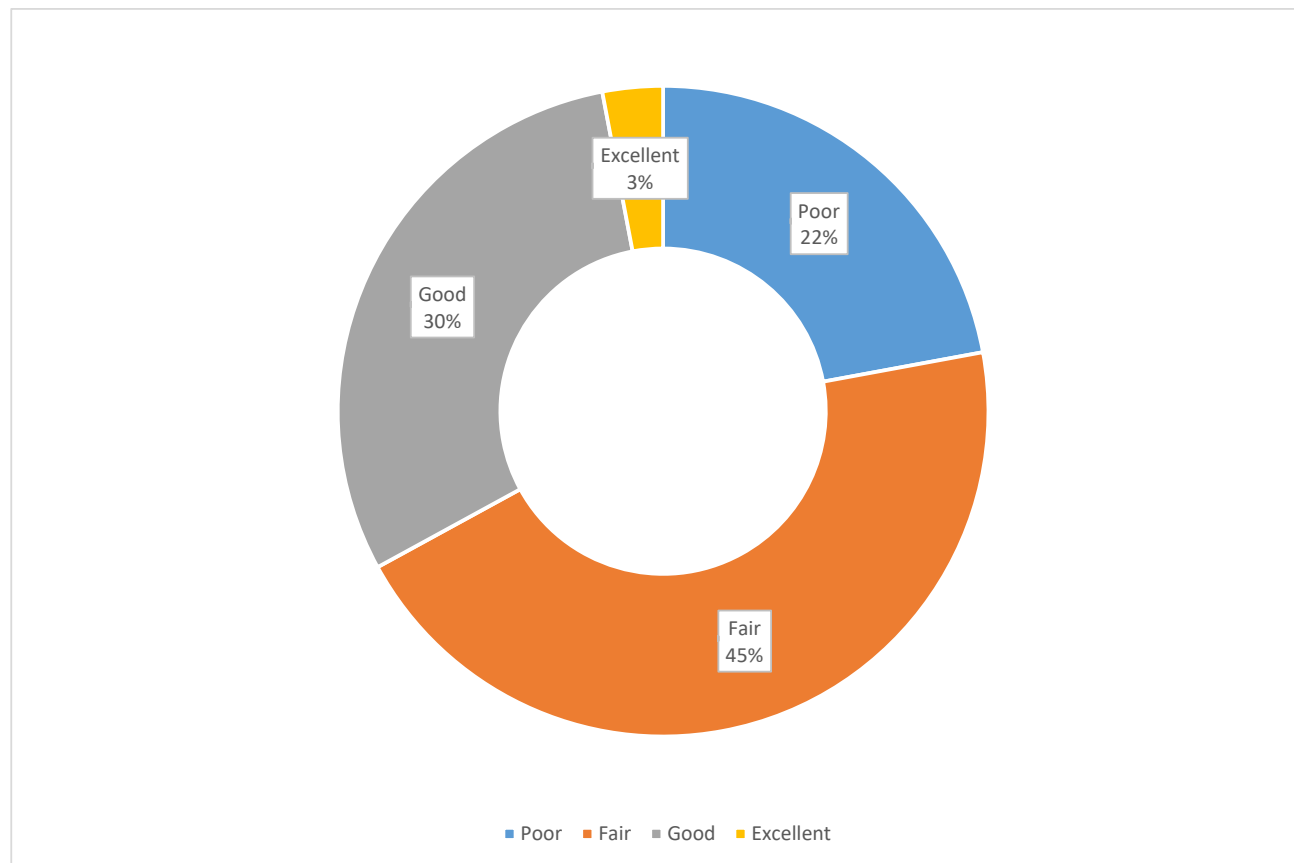


Connect Greater Madison RTP 2050 Public Survey

Extremely important	58%, (159)
Grand Total	272

## Connect Greater Madison RTP 2050 Public Survey

Question 10: How would you rate the performance of the greater Madison region when it comes to planning and implementing transportation solutions?



## Answer Choices

## Response

Poor

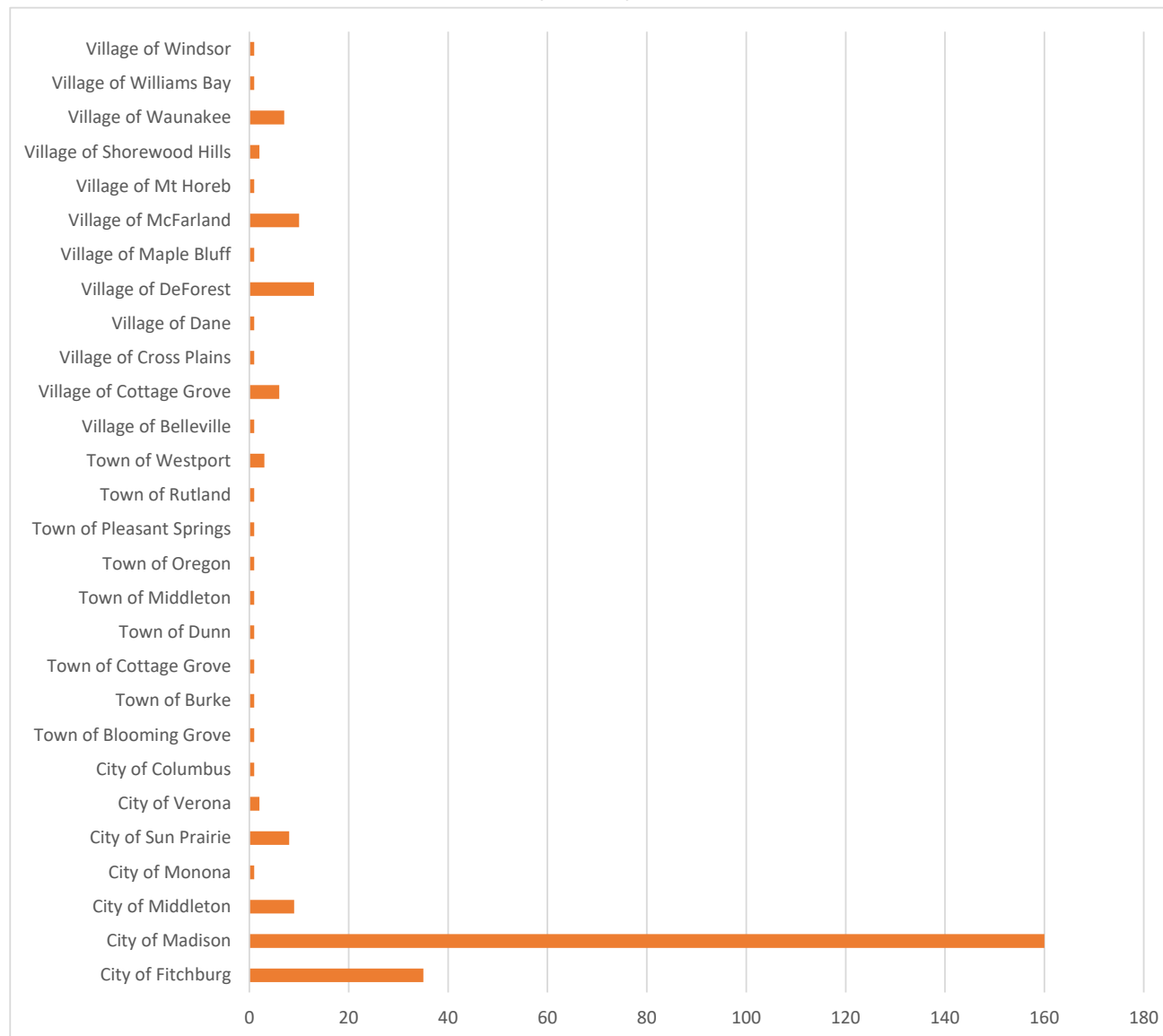
22%, (59)

Connect Greater Madison RTP 2050 Public Survey

Fair	45%, (120)
Good	30%, (80)
Excellent	3%, (8)
Grand Total	268

## Connect Greater Madison RTP 2050 Public Survey

## Question 11: What community do you live in?



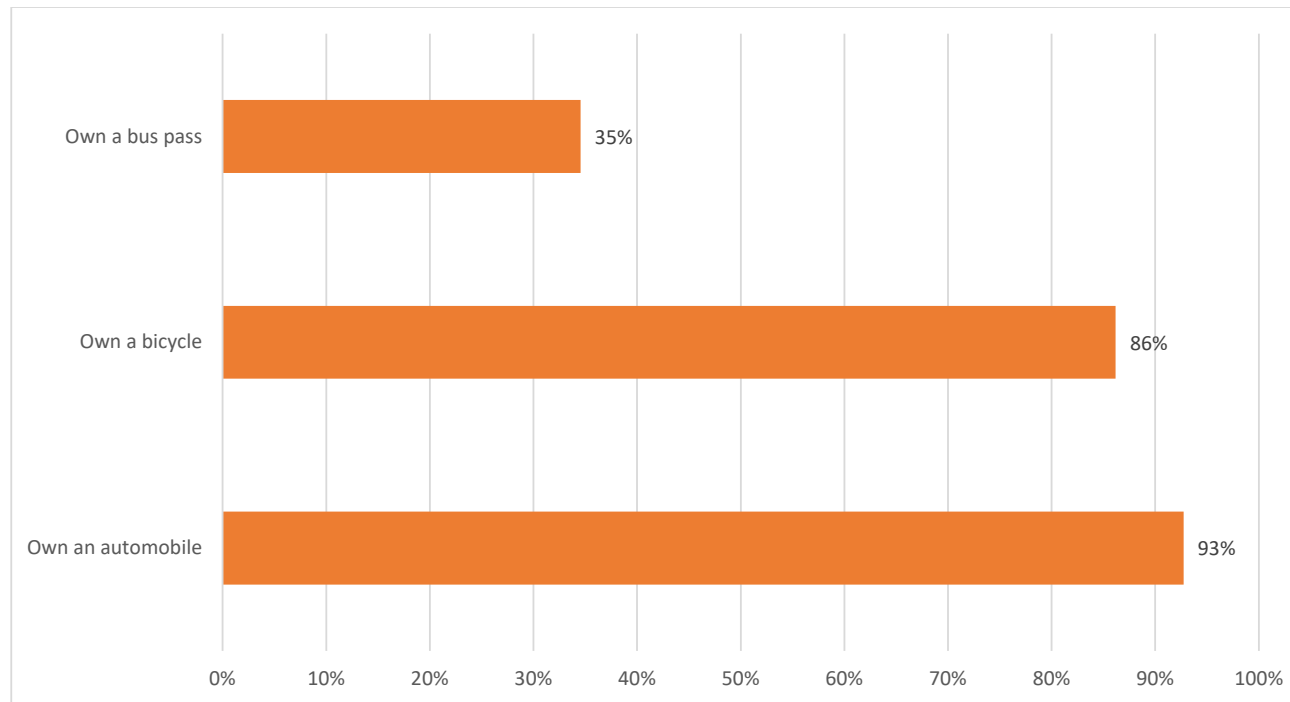
## Connect Greater Madison RTP 2050 Public Survey

<b>Answer Choices</b>	<b>Response</b>
City of Fitchburg	13%, (35)
City of Madison	59%, (160)
City of Middleton	3%, (9)
City of Monona	0%, (1)
City of Sun Prairie	3%, (8)
City of Verona	1%, (2)
Columbus	0%, (1)
Town of Blooming Grove	0%, (1)
Town of Burke	0%, (1)
Town of Cottage Grove	0%, (1)
Town of Dunn	0%, (1)
Town of Middleton	0%, (1)
Town of Oregon	0%, (1)
Town of Pleasant Springs	0%, (1)
Town of Rutland	0%, (1)
Town of Westport	1%, (3)
Village of Belleville	0%, (1)
Village of Cottage Grove	2%, (6)
Village of Cross Plains	0%, (1)
Village of Dane	0%, (1)
Village of DeForest	5%, (13)
Village of Maple Bluff	0%, (1)
Village of McFarland	4%, (10)
Village of Mt Horeb	0%, (1)
Village of Shorewood Hills	1%, (2)
Village of Waunakee	3%, (7)
Village of Williams Bay	0%, (1)
Village of Windsor	0%, (1)



## Connect Greater Madison RTP 2050 Public Survey

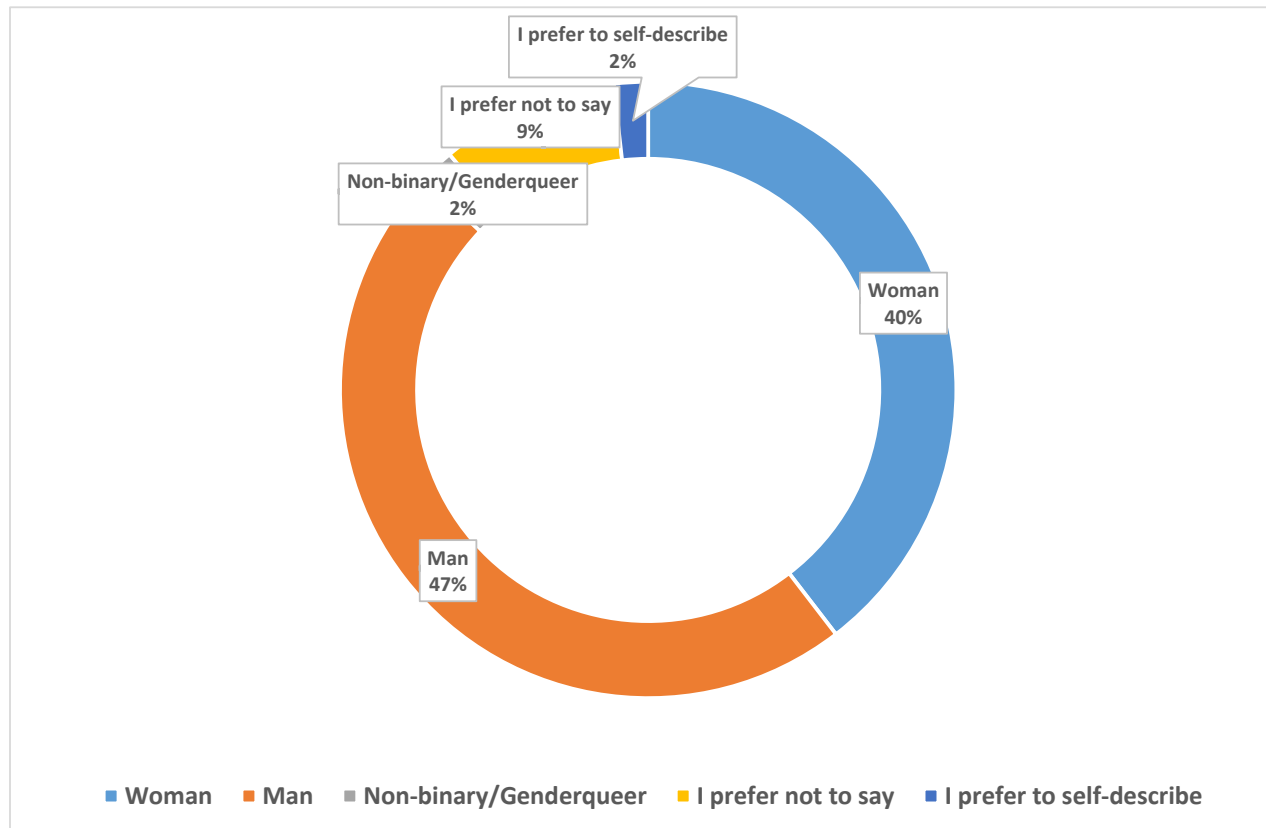
Question 12: Do you or a member of your household: (check all that apply)



Answer Choices	Response
Own an automobile	93%, (255)
Own a bicycle	86%, (237)
Own a bus pass	35%, (95)

## Connect Greater Madison RTP 2050 Public Survey

## Question 13: What is your gender? (please select any that apply)



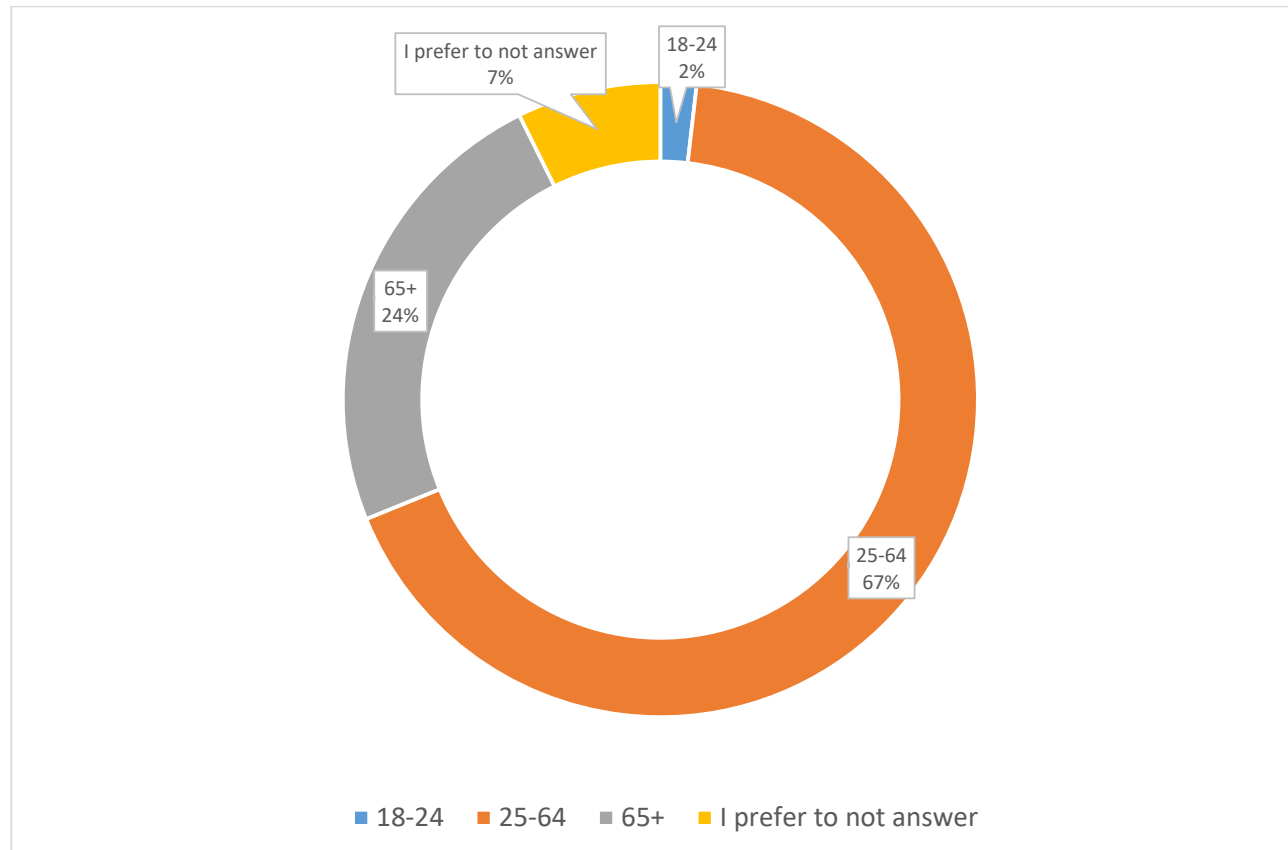
Answer Choice	Response
Woman	40%, (110)
Man	47%, (132)
Non-binary/Genderqueer	2%, (5)
I prefer not to say	9%, (26)
I prefer to self-describe	2%, (5)

## Connect Greater Madison RTP 2050 Public Survey

Grand Total

278

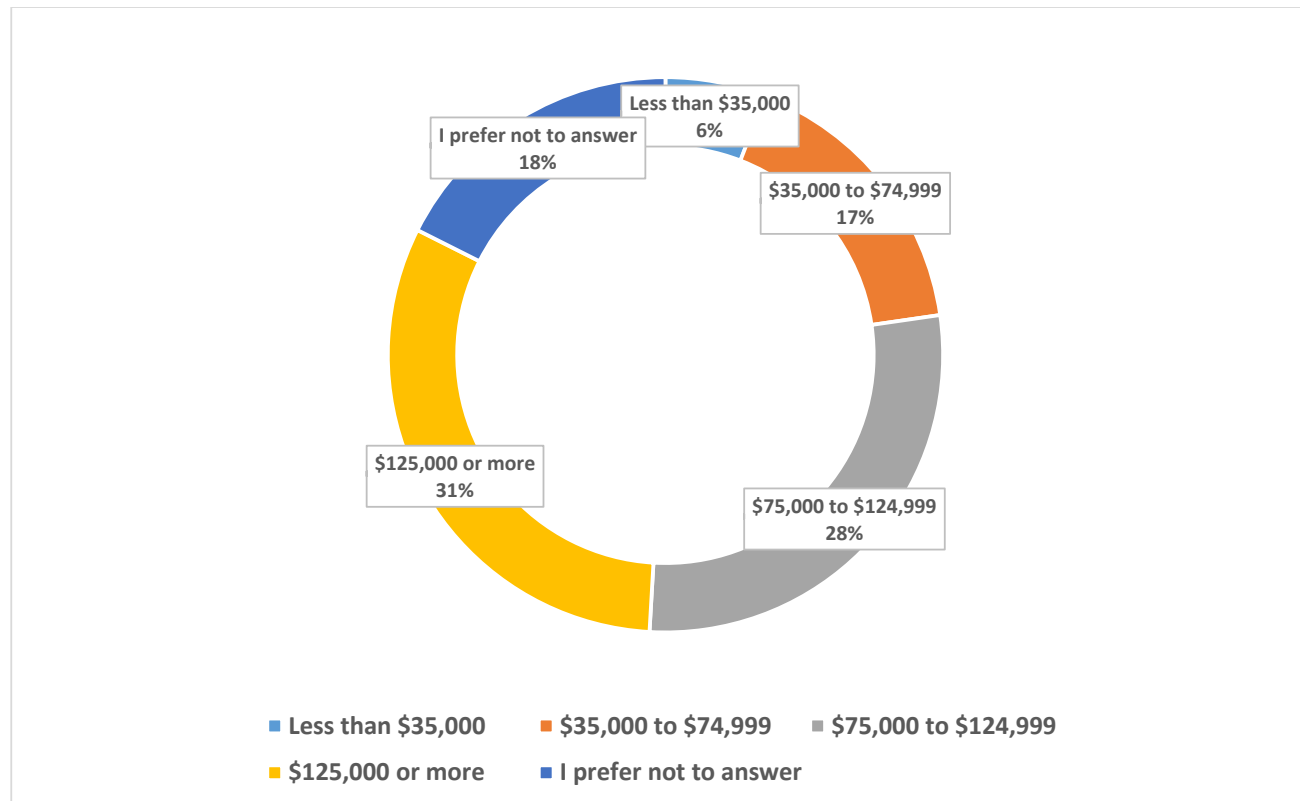
## Question 14: What is your age?



Answer Choices	Response
18-24	2%, (5)
25-64	67%, (183)
65+	24%, (65)
I prefer to not answer	7%, (20)
Grand Total	273

## Connect Greater Madison RTP 2050 Public Survey

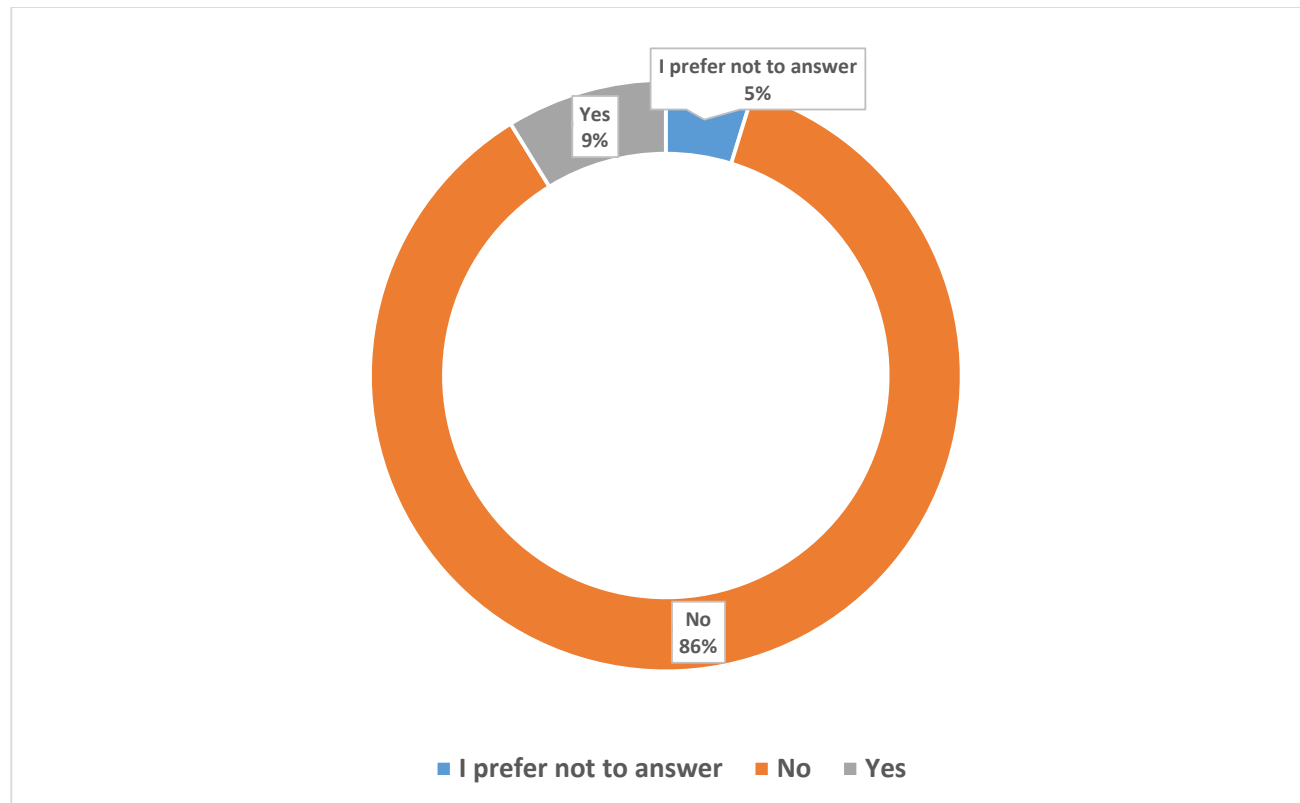
## Question 15: What is your annual household income?



Answer Choices	Response
\$125,000 or more	32%, (86)
\$35,000 to \$74,999	17%, (46)
\$75,000 to \$124,999	27%, (77)
I prefer not to answer	18%, (48)
Less than \$35,000	6%, (16)
Grand Total	273

## Connect Greater Madison RTP 2050 Public Survey

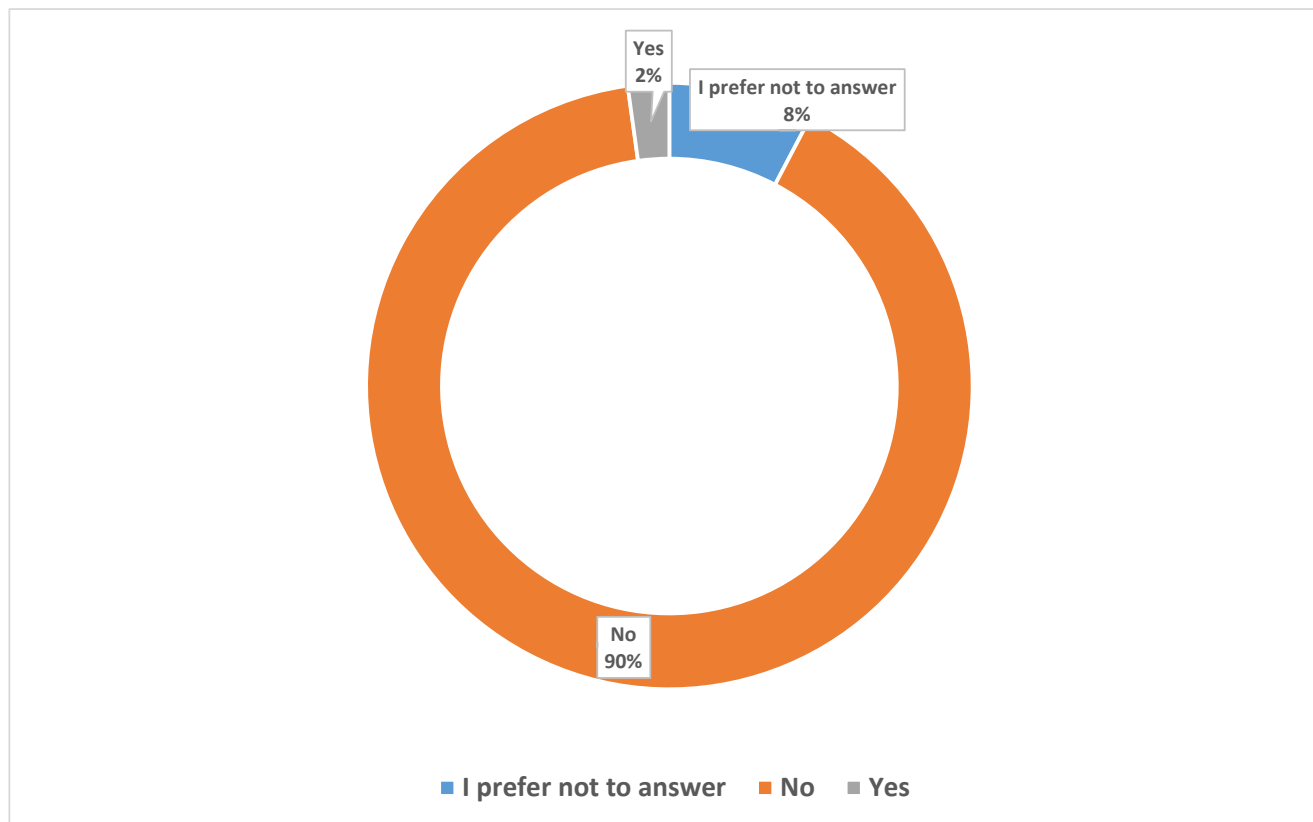
## Question 16: Do you have a mobility limitation?



Answer Choices	Response
I prefer not to answer	5%, (13)
No	86%, (236)
Yes	9%, (24)
Grand Total	273

## Connect Greater Madison RTP 2050 Public Survey

## Question 17: Do you identify as Hispanic or Latinx?

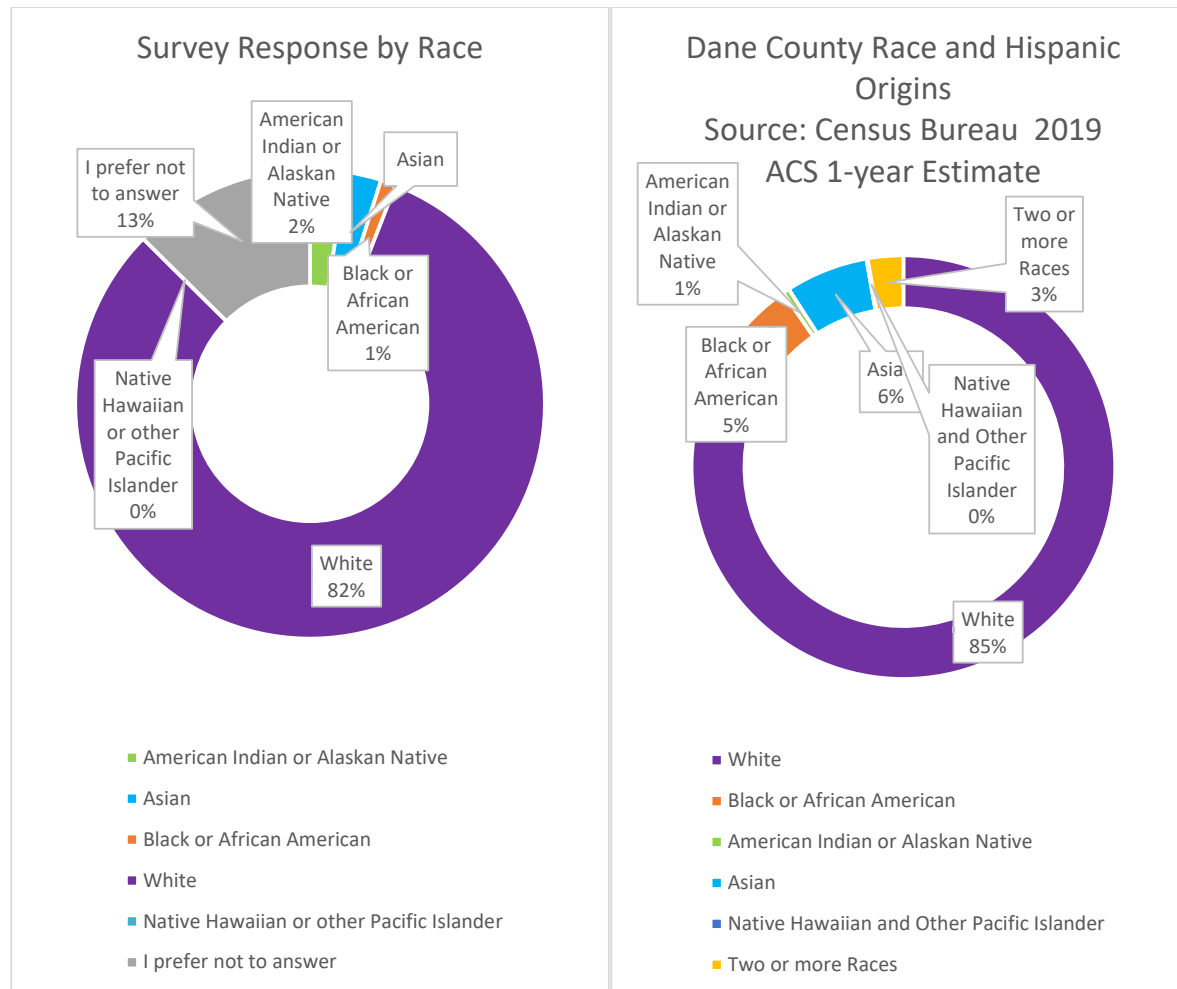


Answer Choices	Response
I prefer not to answer	8%, (21)
No	90%, (246)
Yes	2%, (6)
Grand Total	273



## Connect Greater Madison RTP 2050 Public Survey

## Question 18: Please check all of the following that describe your race:



## Connect Greater Madison RTP 2050 Public Survey

Answer Choices	Response
American Indian or Alaskan Native	2%, (7)
Asian	2%, (7)
Black or African American	1%, (3)
White	81%, (233)
Native Hawaiian or other Pacific Islander	0%, (0)
I prefer not to answer	13%, (36)
Grand Total	286

# Public Involvement Meeting #1: Presentation Slides and Attendee Overview



## POLL

Who is Joining us Tonight?

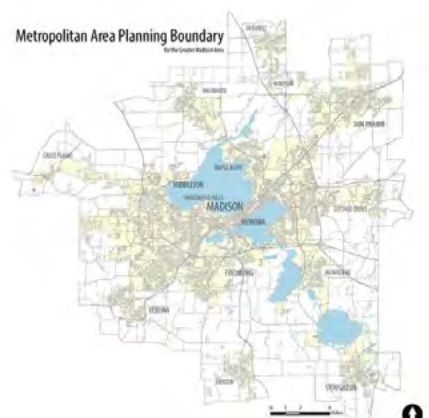
## ABOUT THE MPO

### MISSION

Lead the collaborative planning and funding of a sustainable, equitable transportation system for the greater Madison region.

### VISION

A sustainable, equitable regional transportation system that connects people, places, and opportunities to achieve an exceptional quality of life for all.



## Governance Structure of the Greater Madison MPO



## ABOUT THE MPO

### What the MPO Does



Brings communities together to prioritize, coordinate, and fund transportation projects in our region.



Develops a long-range Regional Transportation Plan (RTP) that looks ahead 20-30 years.



Collects data and develops special plans and studies, such as the Dane County Bicycle & Pedestrian Crash Study.



Approves federal funding for projects.



Manages [www.RideshareEtc.org](http://www.RideshareEtc.org) and promotes sustainable transportation options such as bicycling, bus, carpool, vanpool and walking.

### What the MPO Does NOT Do



Design, construct or maintain roadways or bike paths



Control traffic or enforce traffic laws



Operate public transit service



Plan how land is used

## WHAT IS A REGIONAL TRANSPORTATION PLAN (RTP)?

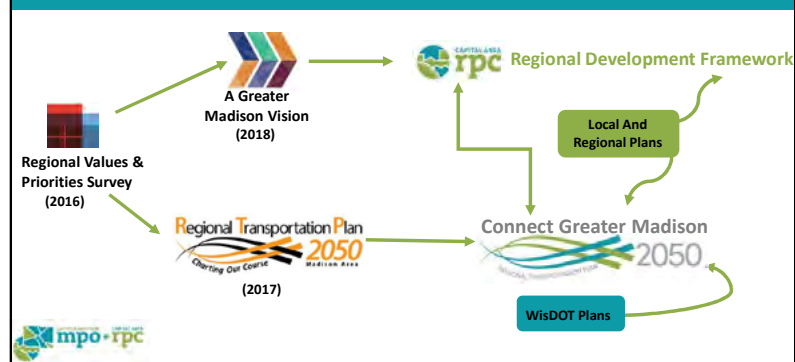
### Continuous, Coordinated, Comprehensive

The RTP sets the **framework** for the future of transportation in the Madison region.

- ☐ Official plan for federal and state funding purposes
- ☐ Identifies future transportation projects, studies, and strategies/actions to be implemented (20+ years)
- ☐ Based upon and designed to support CARPC's Regional Development Framework and local comprehensive plans
- ☐ Financially constrained plan
- ☐ Refined through corridor, area, and mode specific plans and other planning efforts



## PLAN BUILDING BLOCKS

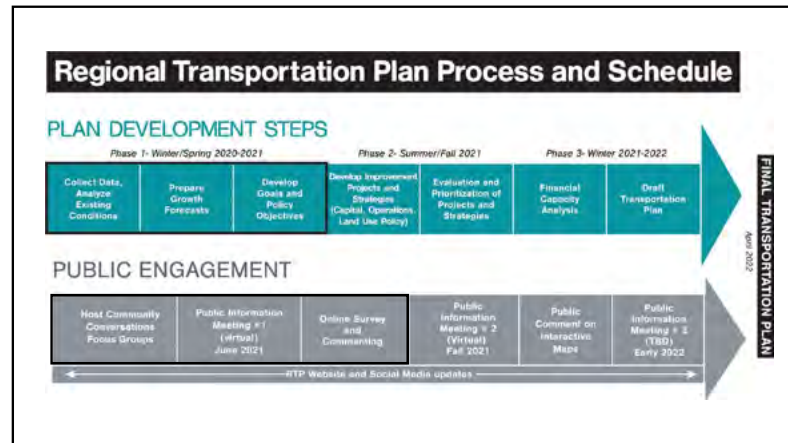


## PLANNING TOGETHER

CARPC Regional Development Framework

Connect Greater Madison MPO Regional Transportation Plan

- ☐ Shared forecasts and growth scenario
- ☐ Shared goals/vision



#### WHAT'S NEW SINCE THE LAST PLAN?

- ☐ Local Comprehensive Plan Updates
- ☐ Projections/RDF Growth Scenario
- ☐ New Travel Forecast Model
- ☐ Household Travel Survey
- ☐ Bus Rapid Transit (BRT)
- ☐ Transit Network Redesign
- ☐ Beltline Flex Lanes Project
- ☐ COVID-19



#### PLAN GOALS

Create  
Connected  
Livable  
Neighborhoods  
and  
Communities





## PLAN GOALS

Improve Public Health, Safety, and Security



## PLAN GOALS

Support Personal Prosperity and Enhance the Regional Economy



## PLAN GOALS

Improve Equity for Users of the Transportation System



## PLAN GOALS

Reduce the Environmental Impact of the Transportation System





## PLAN GOALS

Advance  
System-Wide  
Efficiency,  
Reliability, and  
Integration  
Across Modes



## PLAN GOALS

Establish  
Financial  
Viability of the  
Transportation  
System



## Tracking Goal Performance: Annual MPO Performance Measures Report

### Regional Transportation Plan Goals and Measures

#### Goal I: Create Connected Livable Neighborhoods and Communities

- Miles of Pedestrian Facilities
- Low-Stress Bike Facilities
- Bicycle Utilization

#### Goal II: Improve Public Health, Safety, and Security

- Motor Vehicle Crash Fatalities
- 5-year average # of fatalities\*
- 5-year average rate of vehicle fatalities\*
- Motor Vehicle Series Injuries
- 5-year rolling average # of injuries\*
- 5-year average rate of vehicle injuries\*
- Pedestrian and Bicycle Fatalities and Serious Injuries
- 5-year rolling average # of non-motorized fatalities and serious injuries

#### Goal III: Support Personal Prosperity and Enhance the Regional Economy

- Airline Passenger Traffic

#### Goal IV: Improve Equity for Users of the Transportation System

- Transit Ridership

#### Goal V: Reduce the Environmental Impact of the Transportation System

- Vehicle Miles Traveled
- Mode of Transportation to Work
- Air Quality

\*Bold italicized measures are federally required.

#### Goal VI: Advance System-wide Efficiency, Reliability, and Integration Across Modes

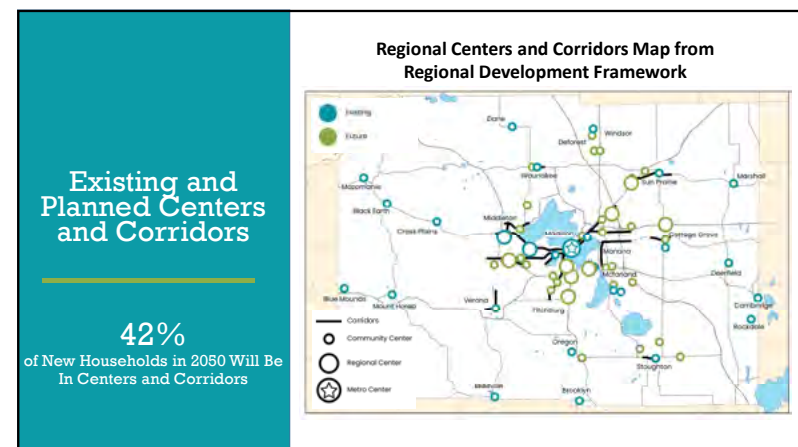
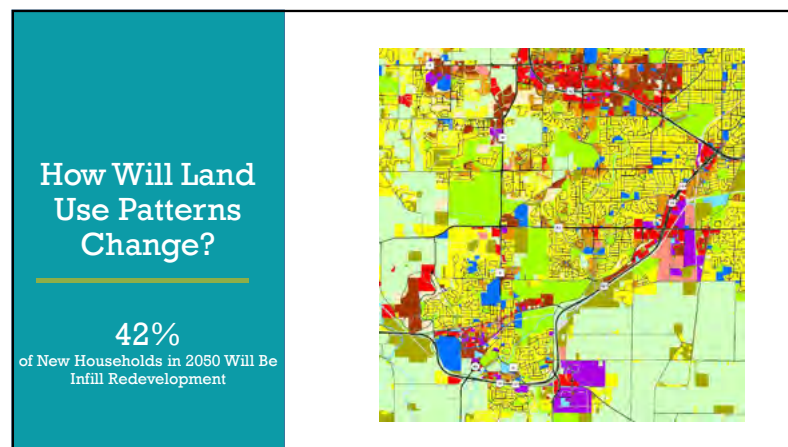
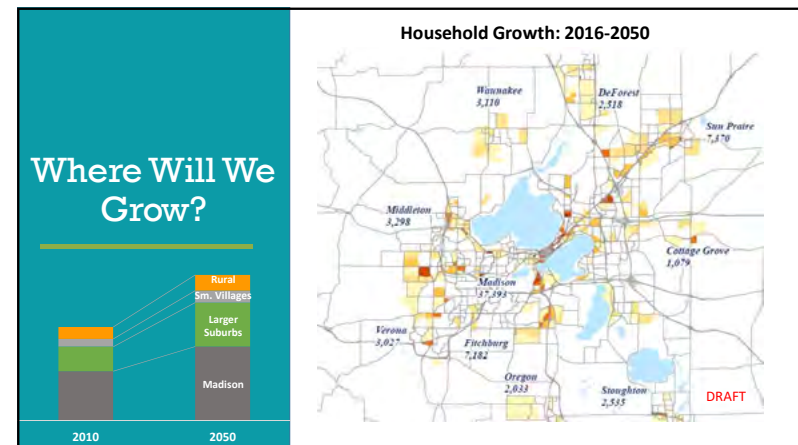
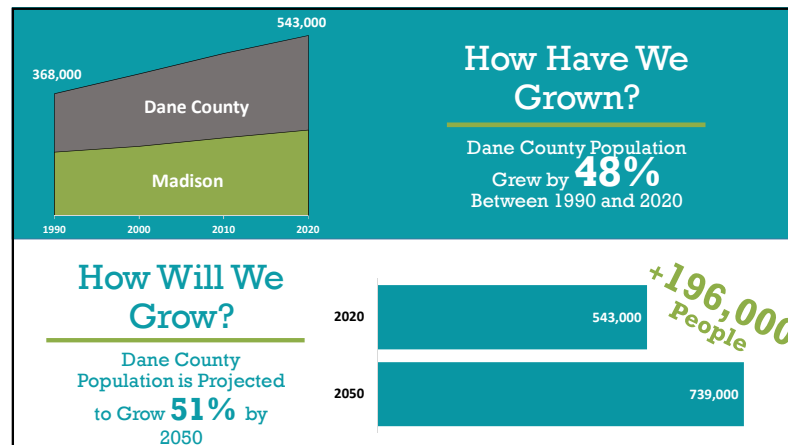
- Transit On-time Performance
- Roadway Congestion and Reliability
- Percentage of miles Traveled on the Interstate that are Reliable\*
- Percentage of miles Traveled on the Non-Interstate NHS that are Reliable\*
- Truck Travel Time Reliability (TTTR) Index\*

#### Goal VII: Establish Financial Viability of the Transportation System

- Buses at or Past Replacement Age\*
- Bridge Condition
- Percentage of NHS Bridges Classified as in Good Condition\*
- Percentage of NHS Bridges Classified as in Poor Condition\*
- Bridge Condition of Non-NHS Bridges
- Pavement Condition
- Percentage of Pavements on the Interstate System in Good Condition\*
- Percentage of Pavements on the Interstate System in Poor Condition\*
- Percentage of Pavements on the Non-Interstate NHS in Good Condition\*
- Percentage of Pavements on the Non-Interstate NHS in Poor Condition\*

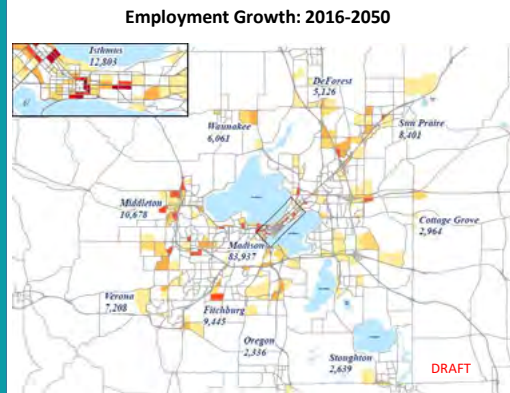
## PLANNED GROWTH, TRANSPORTATION TRENDS, AND CRITICAL ISSUES



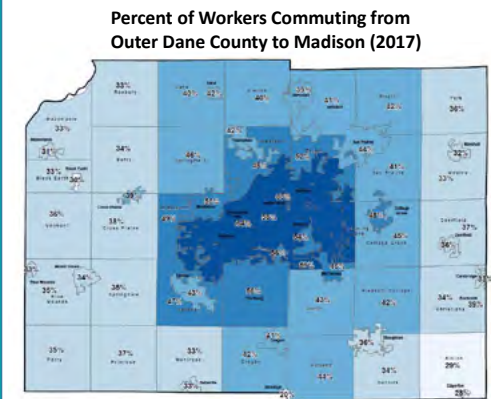


## Where Will New Jobs Be Added?

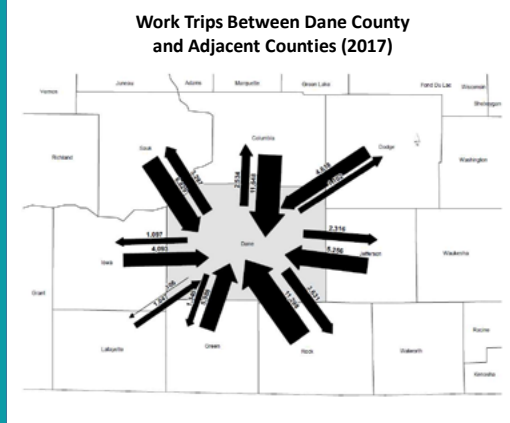
Dane County is Projected to Add Almost 100,000 New Jobs by 2050



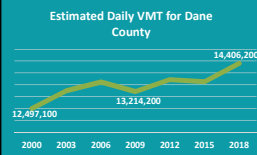
## From Home to Work- Where Are People Commuting?



## From Home to Work- Where Are People Commuting?



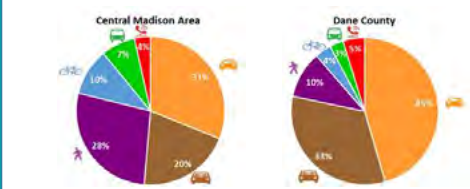
## How Are People Using our Transportation System?



### Mode of Transportation to Work



### Weekday Trip Distribution by Mode



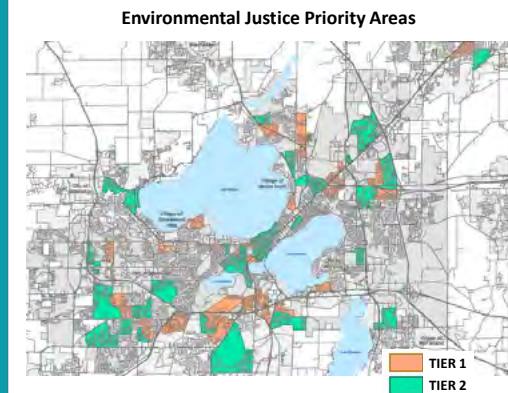
### Drivers of Change:

What New Technology and Changing Trends May Impact How We Use the Transportation System?



### Critical Issues:

Addressing Historical Racial Disparities and Ensuring Equity for ALL



### Critical Issues:

Confronting Climate Change and Improving System Resiliency

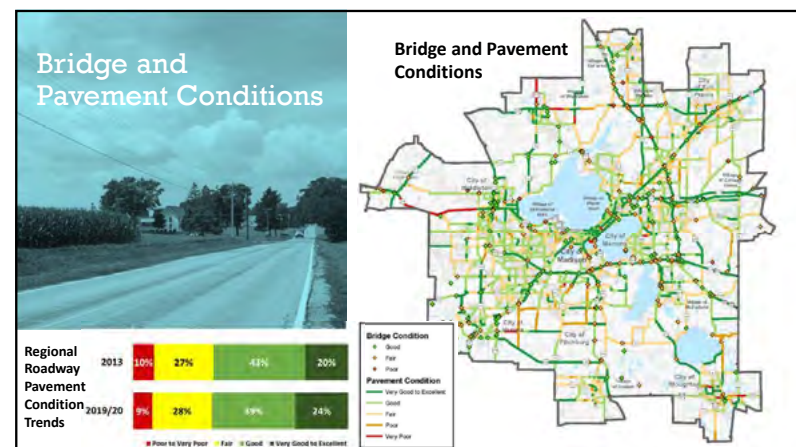
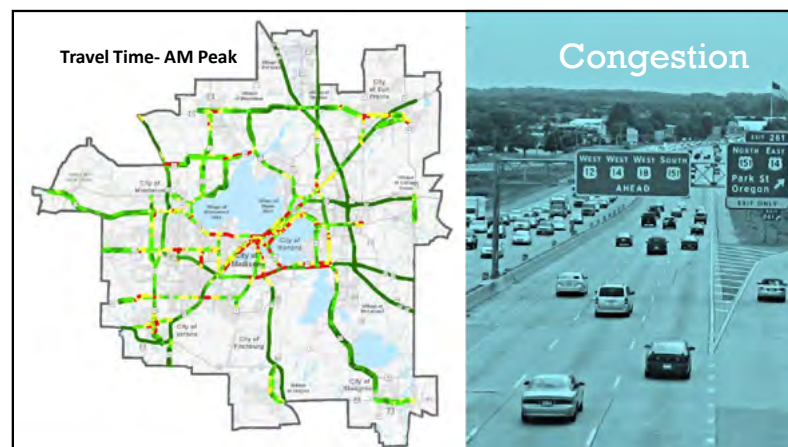
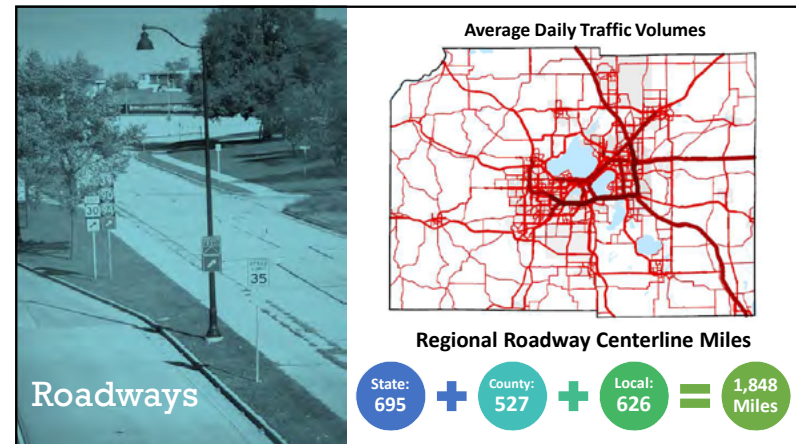


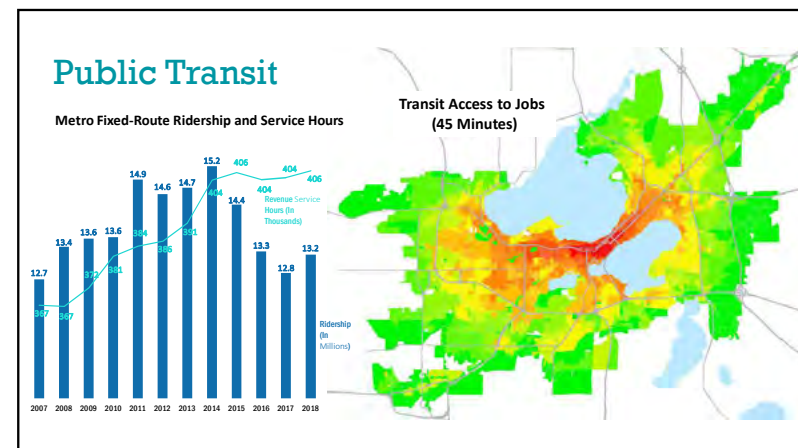
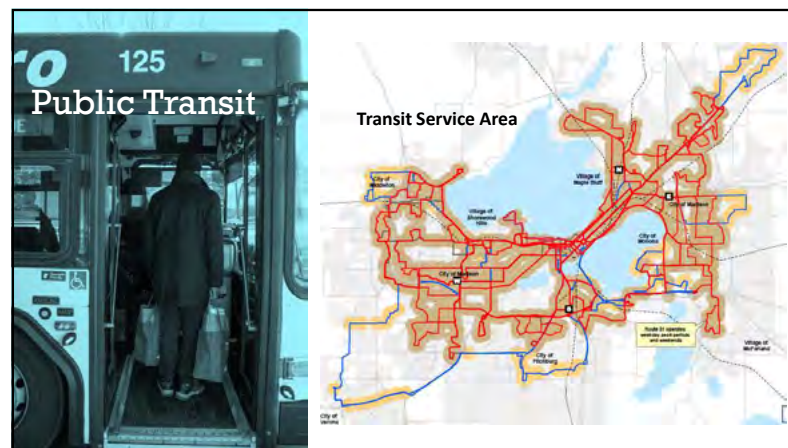
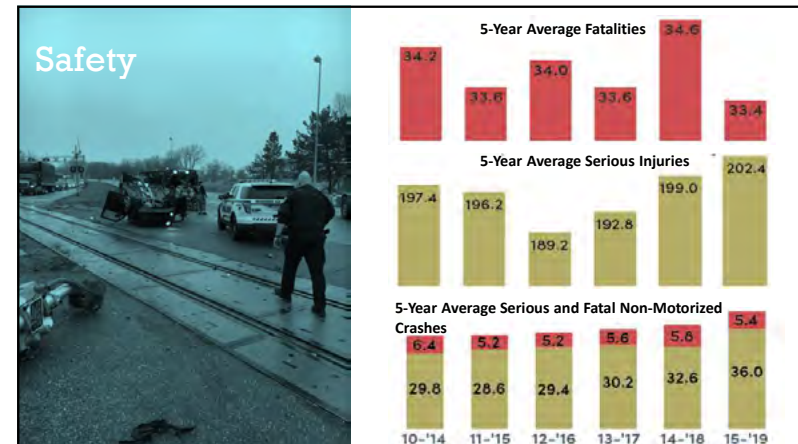
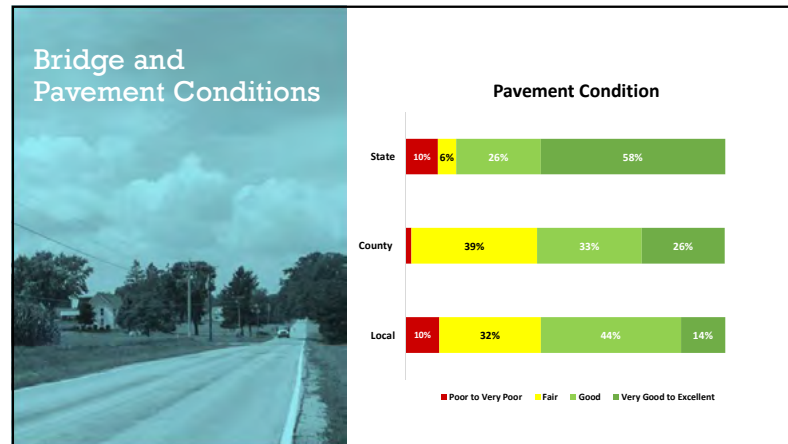
### POLL

In your opinion, what are the most important transportation issues that the Madison region should work on over the next 30 years?

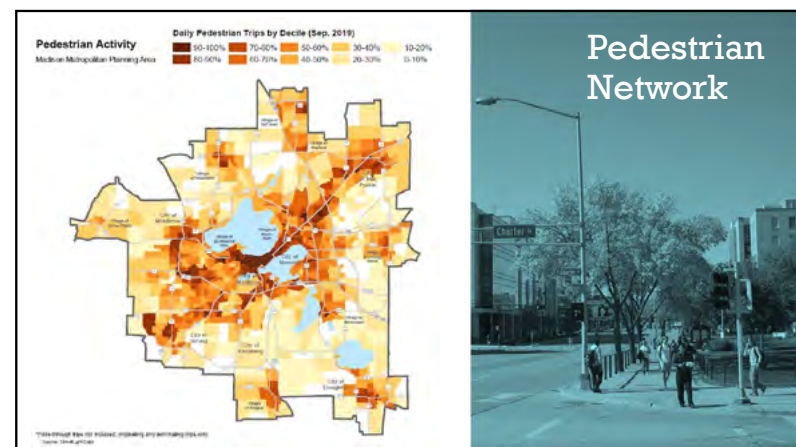
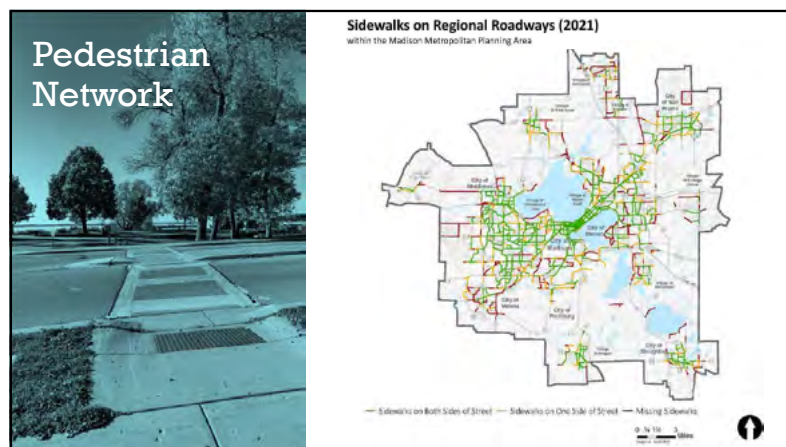
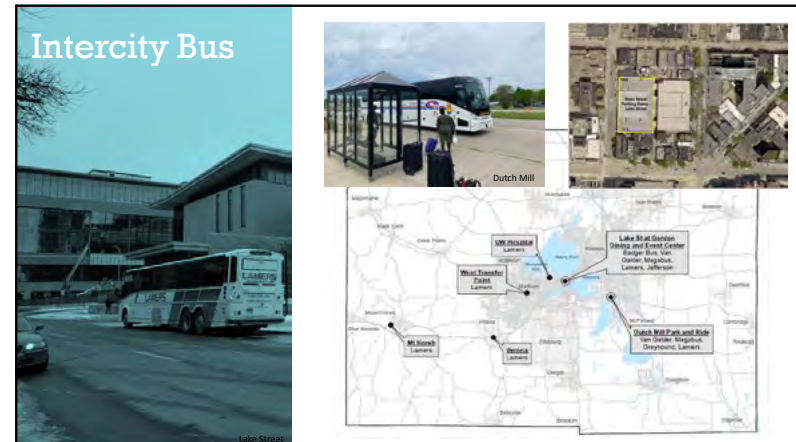
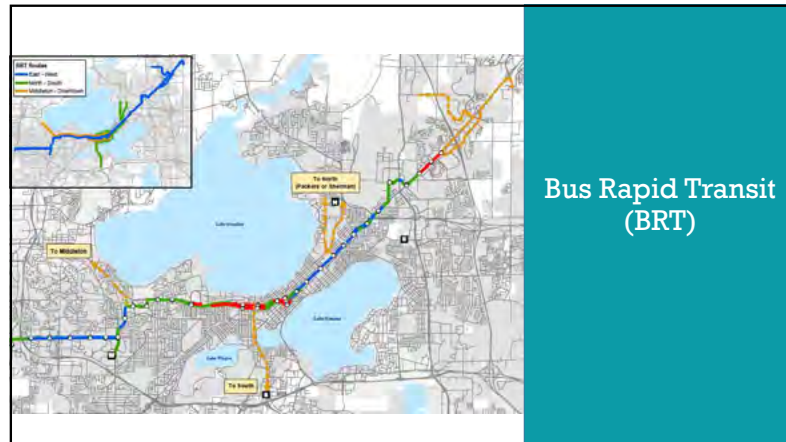
Select up to 5

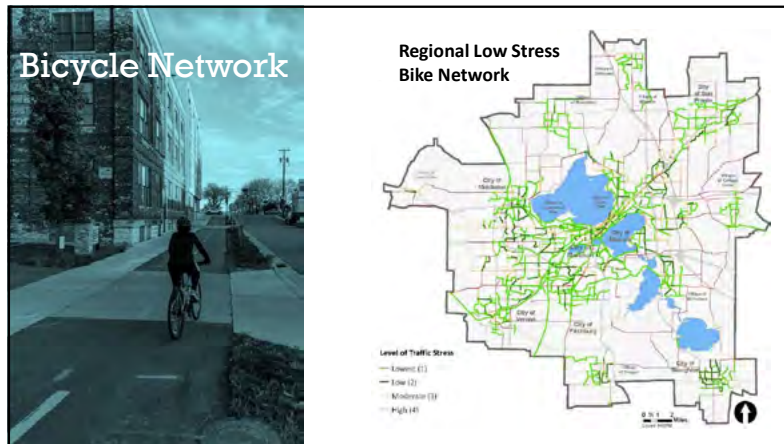












**Plan Website**



<https://greatermadisonmpo.konveio.com/>

## Plan Website

<https://greatermadisonmpo.konveio.com/>

## Public Comment

What we've heard so far:  
Community Focus  
Groups Takeaways

## Public Survey

- Public Survey now open, available in [English](#) and [Spanish](#)
- Looking for feedback on priorities for investment, policies, goals, and programs at a regional scale

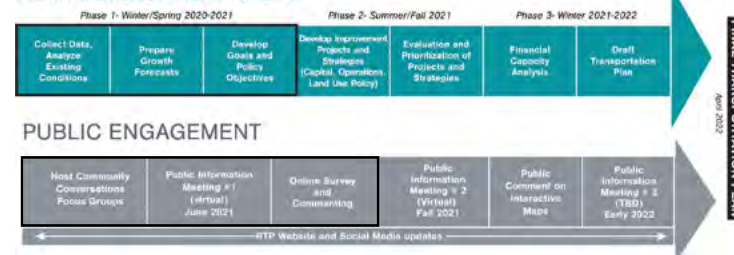
\* 3. What types of transportation projects would you like to see our region invest in more heavily? (Select up to 6)

<input type="checkbox"/> Expand or add micro-mobility services (bikesharing, scooter sharing, etc.)	<input type="checkbox"/> Expand the bus system to serve more areas and communities
<input type="checkbox"/> Improve traffic flow on major highways through roadway expansion and technology solutions.	<input type="checkbox"/> Resurface and/or reconstruct deteriorating streets
<input type="checkbox"/> Expand electric vehicle charging stations and infrastructure	<input type="checkbox"/> Build more paths for walking and bicycling
<input type="checkbox"/> Improve the speed and frequency of bus service in heavily traveled corridors	<input type="checkbox"/> Add sidewalks and bike lanes, and design streets to make them safer and more attractive to walk and bike
<input type="checkbox"/> Improve roadway safety through design changes, technology, and lower speed limits	<input type="checkbox"/> Improve passenger transportation to areas outside the Madison metro area by bus and/or rail
<input type="checkbox"/> Expand transit options for suburban and rural areas not efficiently served by buses (vanpools, shared rides on demand)	

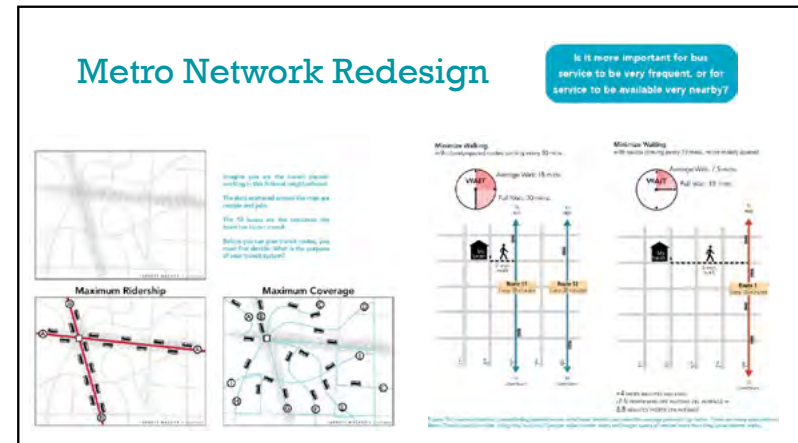
Other (please specify):

## Regional Transportation Plan Process and Schedule

### PLAN DEVELOPMENT STEPS







## Public Information Meeting #1 - Attendee Overview:

Due to public health measures, all public information meetings were held virtually via Zoom. For the round of public information meetings, 35 people registered and 17 people attended. Attendees were polled on where they worked and what they believed was the most important transportation issue facing the Madison region in over the next thirty years. Attendees had backgrounds from nonprofit or advocacy groups, local county government staff or elected officials, as well as some interested community members. Attendees indicated a variety of answers to the most important transportation issues facing the region over the next thirty years including: expanding transportation funding, improving equity in transportation improving public transportation, planning for automated/driverless vehicles, reducing impacts on climate change, improving walkability and bikability. Attendees asked questions concerning bus rapid transit plans, transit equity, bicycle accessibility during Q&A session. A recording of one of the webinars was posted to the MPO YouTube page and received 47 views.

# Public Involvement Meeting #2 - Meeting Presentation and Attendee Overview:



## POLL

Who is Joining us Tonight?

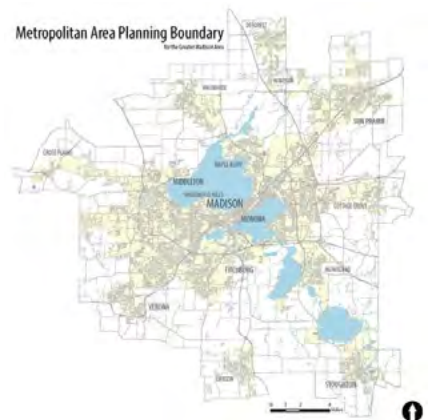
## ABOUT THE MPO

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Lead the collaborative planning and funding of a sustainable, equitable transportation system for the greater Madison region.

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A sustainable, equitable regional transportation system that connects people, places, and opportunities to achieve an exceptional quality of life for all.



## Governance Structure of the Greater Madison MPO





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### What the MPO Does



Brings communities together to prioritize, coordinate, and fund transportation projects in our region.



Develops a long-range Regional Transportation Plan (RTP) that looks ahead 20-30 years.



Collects data and develops special plans and studies, such as the Dane County Bicycle & Pedestrian Crash Study.



Approves federal funding for projects.



Manages the RoundTrip program ([www.roundtripgreatermadison.org](http://www.roundtripgreatermadison.org)), and promotes sustainable transportation options such as bike, bus, car/vanpool and walking.

### What the MPO Does NOT Do



Design, construct or maintain roadways or bike paths



Control traffic or enforce traffic laws



Operate public transit service



Plan how land is used

## WHAT IS A REGIONAL TRANSPORTATION PLAN (RTP)?

### Continuous, Coordinated, Comprehensive

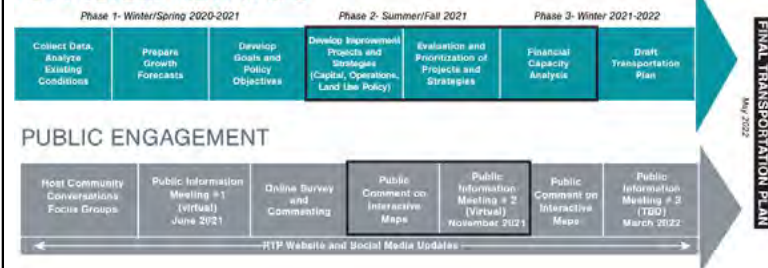
The RTP sets the framework for the future of transportation in the Madison region.

- ☐ Official plan for federal and state funding purposes
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- ☐ Financially constrained plan
- ☐ Refined through corridor, area, and mode specific plans and other planning efforts



## Regional Transportation Plan Process and Schedule

### PLAN DEVELOPMENT STEPS



## Public Involvement Meeting Series 1 Recap

- ☐ Introduction to RTP
- ☐ Relationship to CARPC Regional Development Framework
- ☐ Forecasts
- ☐ Growth Scenario
- ☐ Current Transportation System



View PIM 1 Recording Online: [https://www.youtube.com/watch?v=Qzeb\\_61kU04&t=3s](https://www.youtube.com/watch?v=Qzeb_61kU04&t=3s)

## What We've Heard So Far: Public Engagement

### Community Conversations Focus Groups

Bayview Foundation –  
5 participants



Latino Academy –  
2 sessions, 15  
participants each



Sun Prairie Neighborhood  
Navigators Program – 4  
participants



### Focus Group Key Themes

Cost of Transportation

Desire for More Convenient Public Transit

Knowledge and Language Barriers

Access for People with Disabilities & Seniors

Impacts on Family and Community

Bicycling Pros and Cons

"My car payment is my biggest expense. Having a car for regular use means that I have to sacrifice a lot of things... The money we spend to have that car so that we can have flexibility means that we don't have money to spend on other things like trips, meals, or fun extra activities."

"I believe that Metro System makes it easier for people to get around, but many people decide not to use public transportation because it is a very lengthy and slow system. There is also a lack of knowledge about bus routes."

"I like to bike, but I don't do it that much. It's healthy. I would like to bike more if there were more paths, because I'm not confident on a bike."

### Online Public Survey

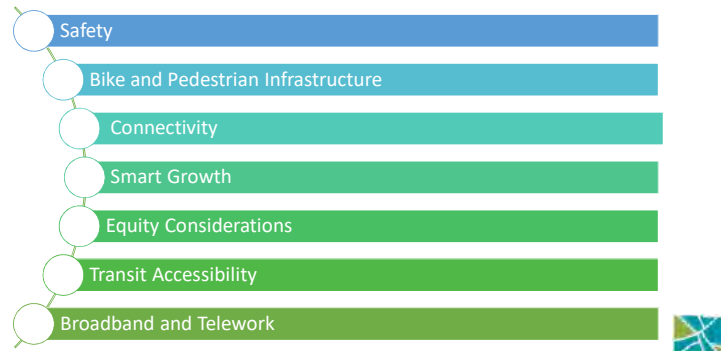
274  
Respondents



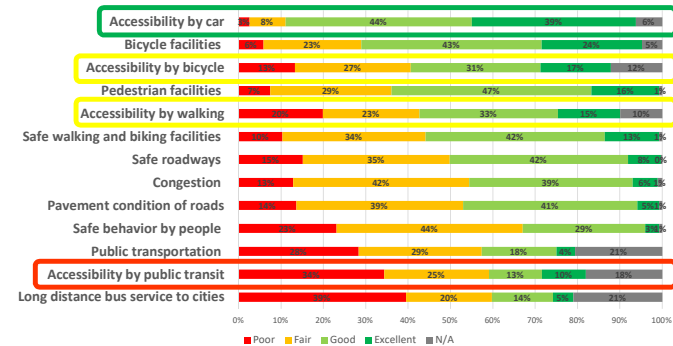
Review public survey results at: <https://greatermadisonmop.konveio.com/public-survey-results>



### Online Public Survey Key Themes



### Survey: Quality of Existing System



### Survey: Most Important Issues

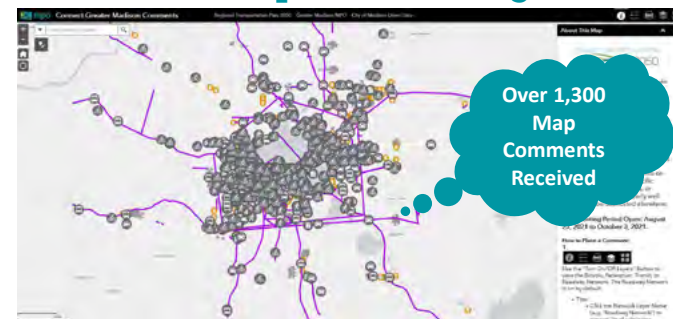
- Maintain and improve existing infrastructure
- Expand and improve public transit
- Reduce impact of climate change

#### Respondents' Least Important Issues:

- Congestion
- Technology Improvements

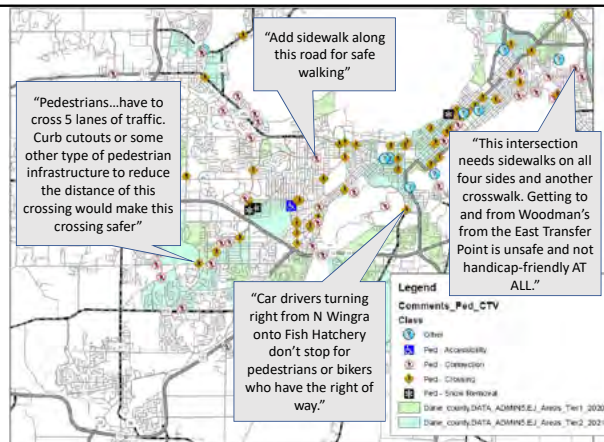


### Interactive Map Commenting Tool

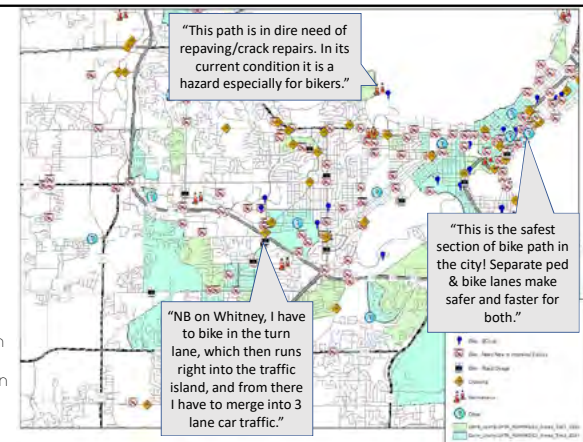


View Map Comments At:  
<https://cityofmadison.maps.arcgis.com/apps/webappviewer/index.html?id=ac962ec7e11a4e9b9aa518fb50bcf79>

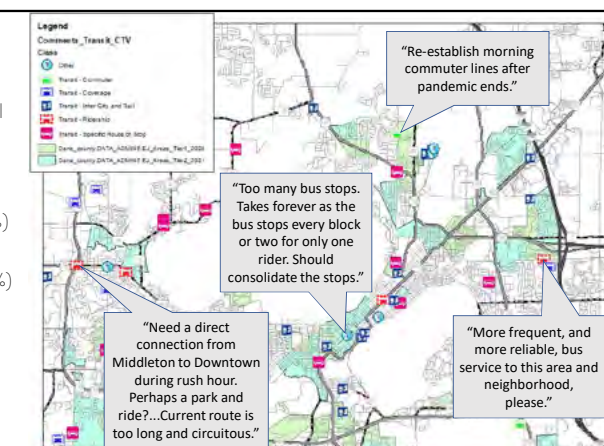
Concentrated in  
central Urban  
Area



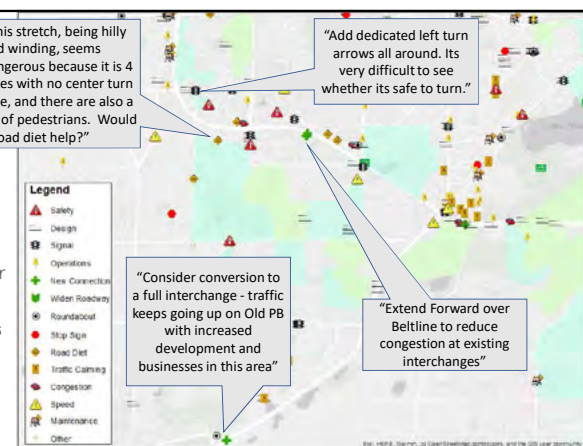
Concentrated in Urban Area, with many needed new facilities in rural and outlying communities



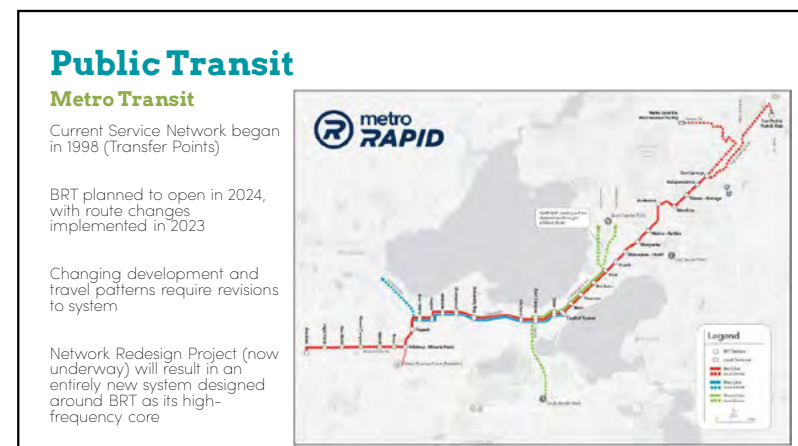
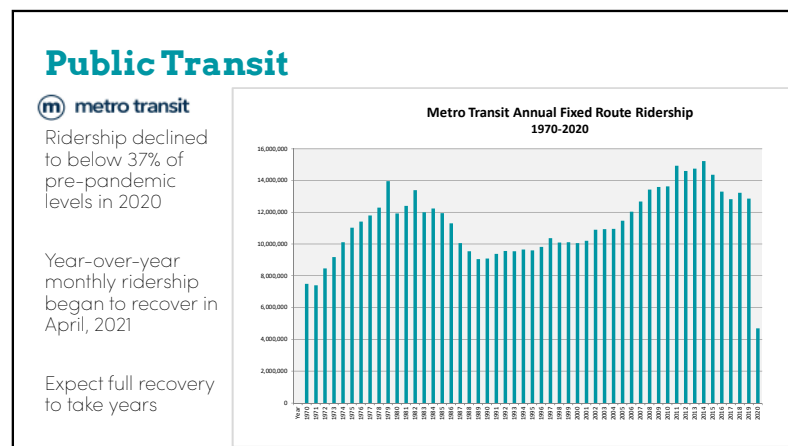
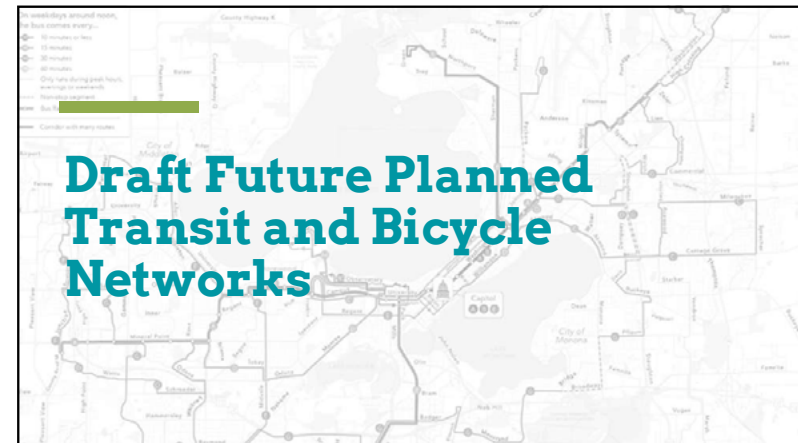
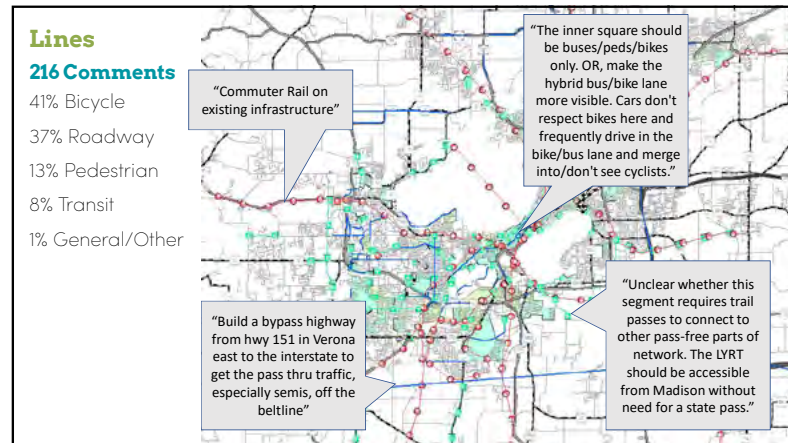
Inter-City and Rail - 58 (50%)  
Specific Route or Stop - 35 (30%)  
Coverage - 11 (9%)  
Other - 8 (7%)  
Commuter - 7 (6%)  
Ridership - 5 (4%)



- 60% Flagged as Safety Related
- 55% Roadway Design
- 21% Operations, including Signals
- 9% Traffic Calming or Road Diet
- 6% New Connections or Capacity Expansion
- 5% Maintenance











## BRT & Network Redesign Next Steps



BRT Station Design Competition – First Place (#1286)

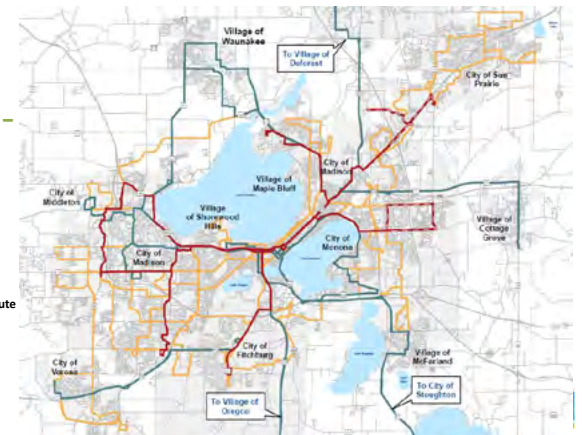
- ❑ Network Redesign – Draft Network Plan (Jan. 2022)
- ❑ East-West BRT – Construction (2023–2024)
- ❑ Network Redesign – Implementation (Likely Phased – August 2022, August 2023, and August 2024)
- ❑ East-West, North-South, and Middleton BRT – Route Implementation (Likely Phased with Network Redesign, East-West BRT Fully Operational in August 2024)
- ❑ North-South BRT – Construction (Potentially 2024–2026)



## Public Transit

### Future Network – Service Types

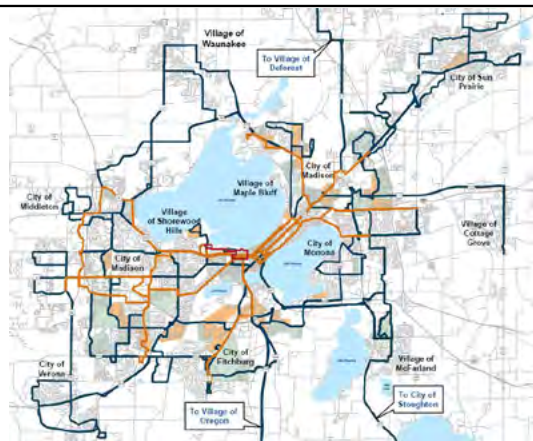
- Bus Rapid Transit (BRT) Route
- BRT Route- Local Service
- Express/Commuter Route
- Local Route



## Public Transit

### Future Network – Route Headways (AM & PM Peak)

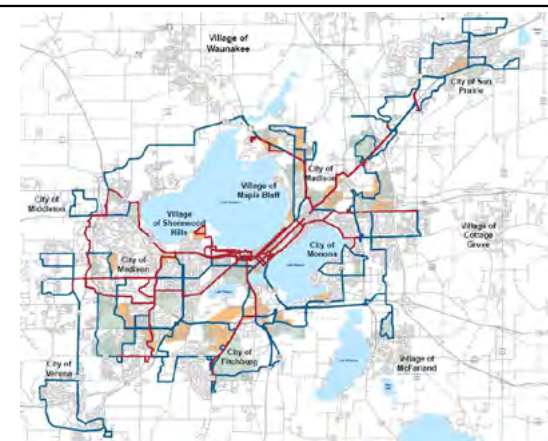
- < 15 Minutes
- 15 Minutes
- 30 Minutes
- EJ Areas: Tier 1
- EJ Areas: Tier 2



## Public Transit

### Future Network – Frequent Service Network (Mid-Day)

- 1-4 Buses
- 5-28 Buses
- EJ Areas: Tier 1
- EJ Areas: Tier 2



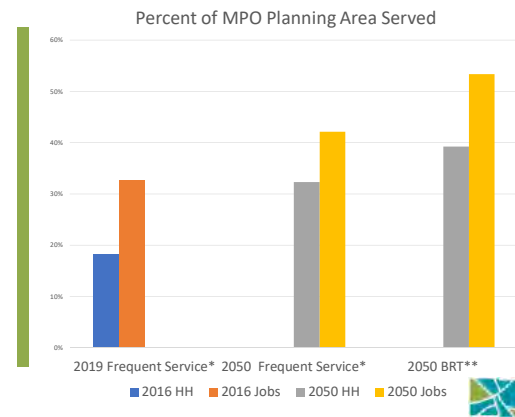
### Future Transit Access Analysis

Frequent Service Network Access\*:

275% growth in Households (HH)

185% growth in Jobs

\*Within 1/4 mile of frequent transit service (4 or more buses/hour or 15-minute headways mid-day)  
\*\*Within 1/2 mile of BRT, including local extensions (mid-day)



### Other Transit Service Models & Support

#### Taxi/TNC\*

- Potential partnership with Metro for reduced/flat fare areas to/from transit
- Shared-ride taxi (e.g. Sun Prairie, Stoughton)



\*Transportation Network Company (Uber, Lyft, Carepool)

#### Microtransit

- Deviated route or demand-response
- Limited service area
- Contracted Service or Directly Operated



RTD FlexRide (Denver, CO)

#### Mobility Hub

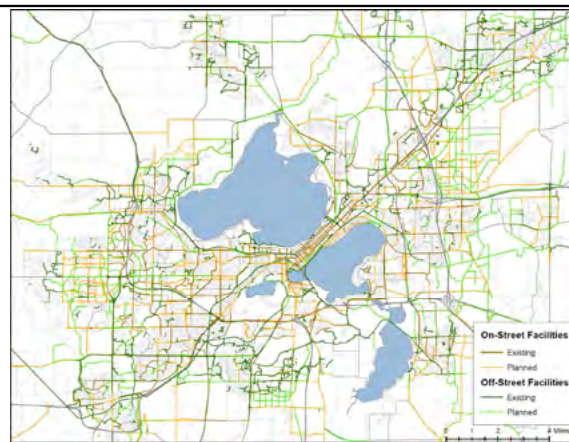
- Transit access
- Taxi/TNC stand
- Micromobility options (BCycle, e-scooters)
- Covered bicycle storage, fix-it stations
- Car share (e.g. Zipcar)



Minneapolis, MN

### Bicycle Network

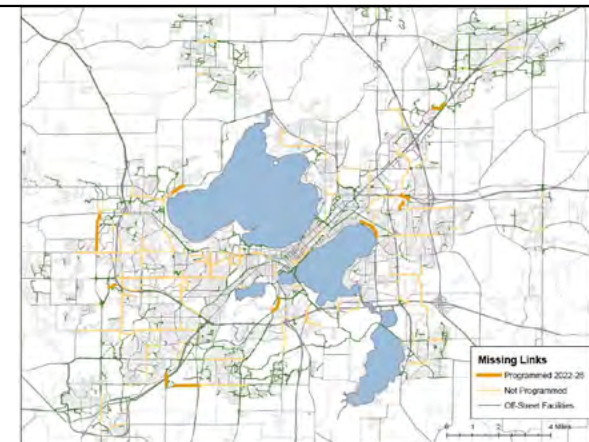
Existing and Planned Bike Facilities



### Bicycle Network

Priority Missing Links

Immediate Needs Serving Existing Development

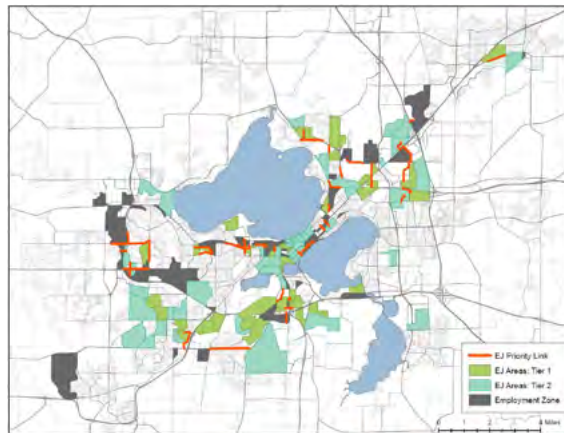




## Bicycle Network

### Missing Links

Priority links connecting environmental justice (EJ) areas with employment zones.

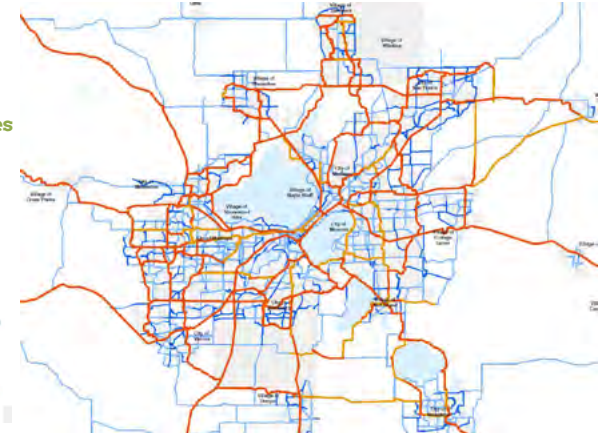


## Bicycle Network

### Planned Regional Routes

Includes existing and planned future facilities.

**Primary**  
 Shared-Use Path  
 On Street  
**Secondary**  
 Shared-Use Path  
 On Street

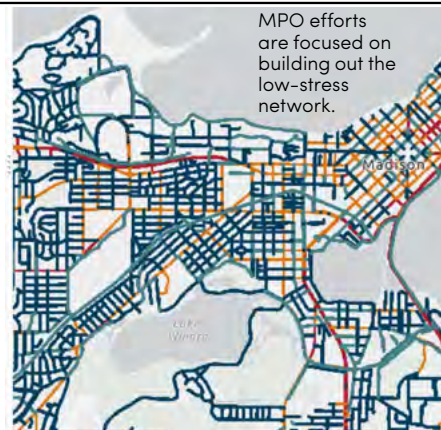


## Bicycle Network

### Level of Traffic Stress

Bike Level of Traffic Stress (LTS) Existing

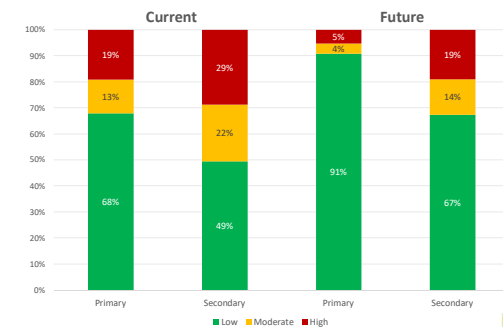
Off Street LTS 1  
 Bike Path  
 On Street LTS  
 LTS 1: Lowest stress  
 LTS 2: Low stress  
 LTS 3: Moderate stress  
 LTS 4: Highest stress  
 Bicycles prohibited



## Bicycle Network

### Current and Future LTS on Regional Routes

Planned improvements are expected to substantially reduce LTS on the regional network.



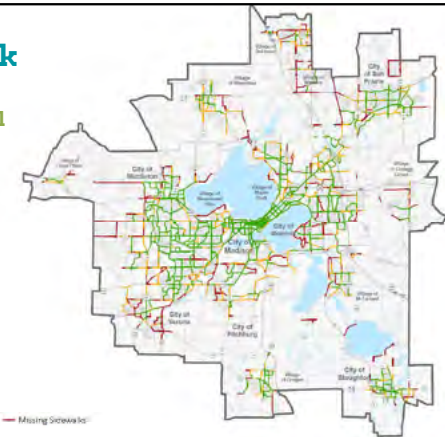
## Pedestrian Network



## Pedestrian Network

### Sidewalks on Urban Arterial and Collector Roads

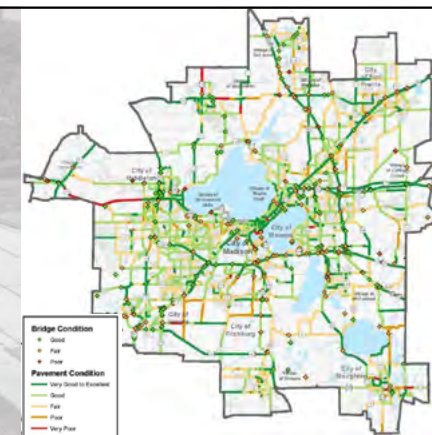
Sidewalk coverage is most robust in the City of Madison and in central areas of suburban communities.



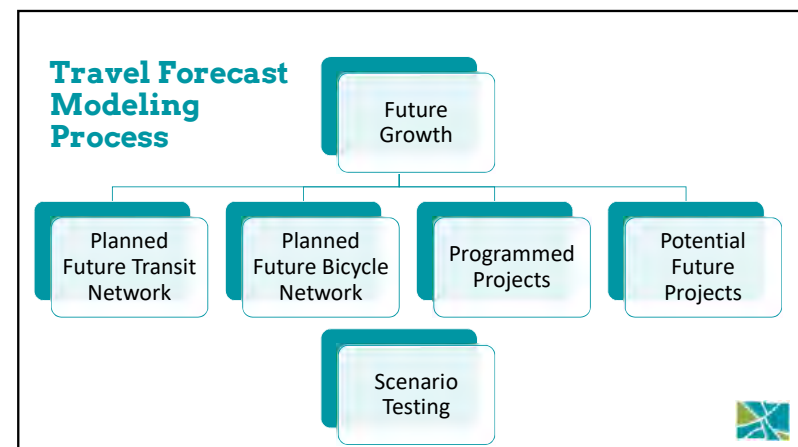
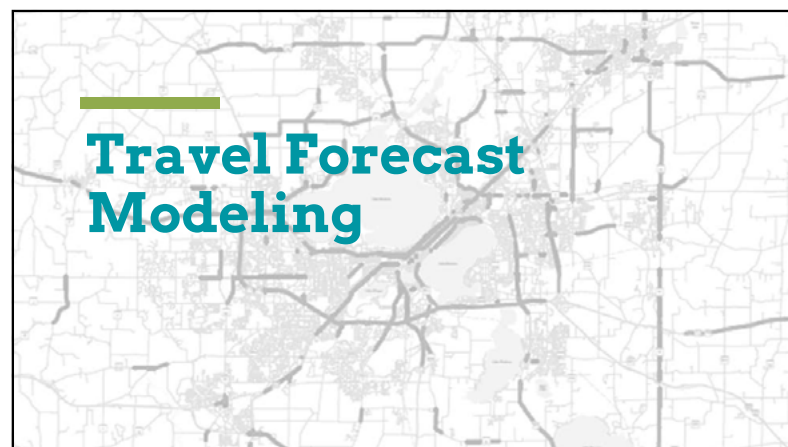
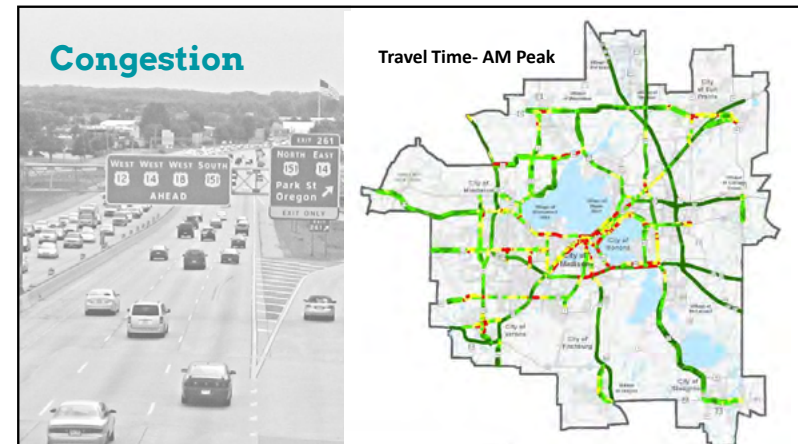
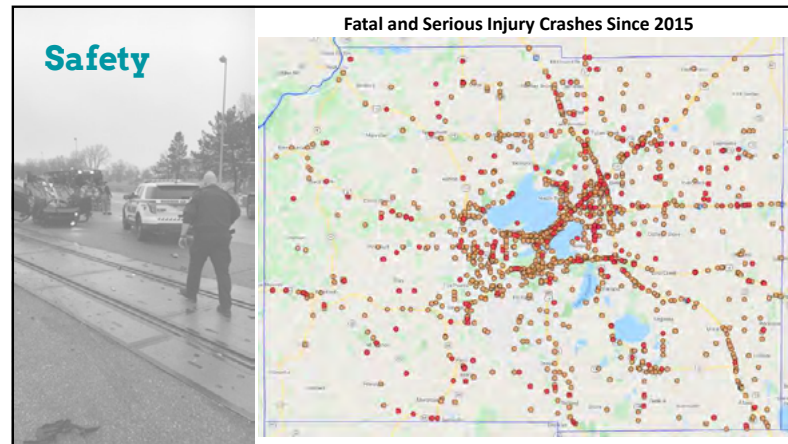
## Draft Roadway Facility Needs Analysis



## Pavement Conditions



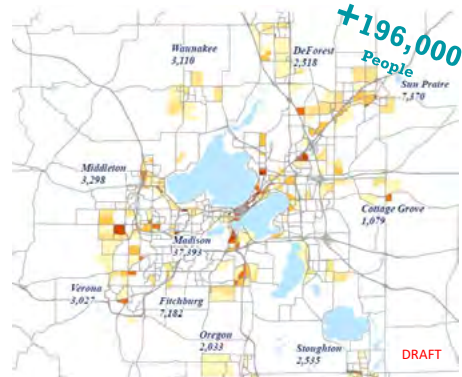




## Where Will We Grow?

Dane County Population is Projected to Grow **51%** by 2050

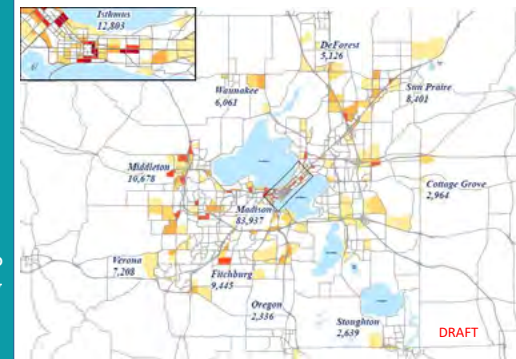
Household Growth: 2016-2050



## Where Will New Jobs Be Added?

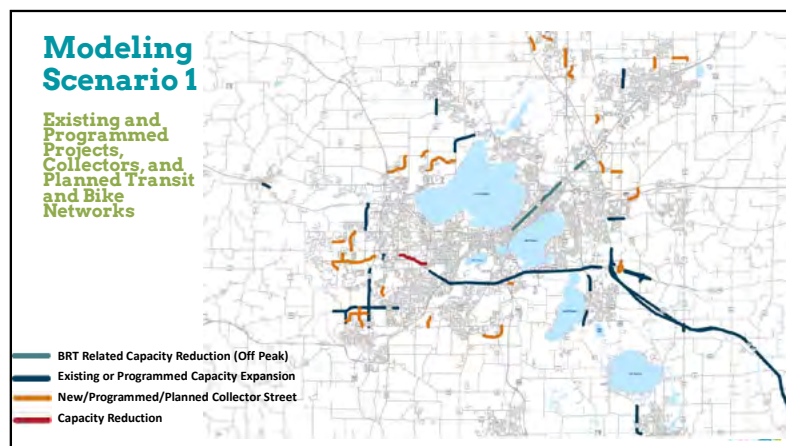
Dane County is Projected to Add Almost 100,000 New Jobs by 2050

Employment Growth: 2016-2050



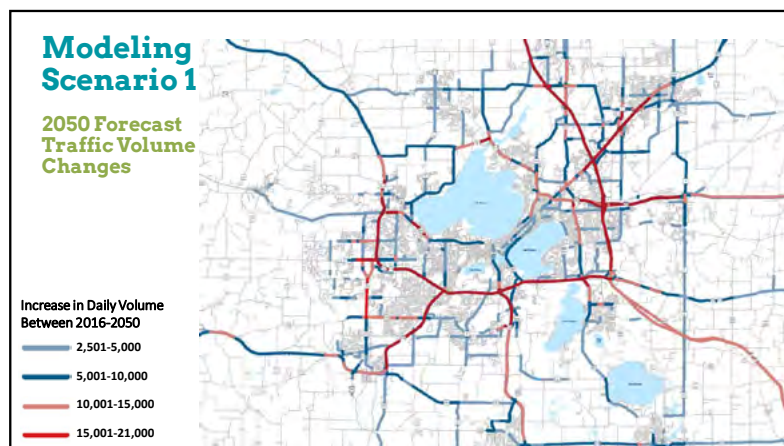
## Modeling Scenario 1

Existing and Programmed Projects, Collectors, and Planned Transit and Bike Networks



## Modeling Scenario 1

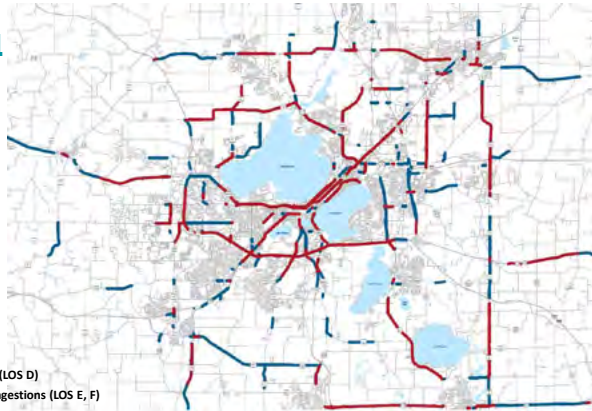
2050 Forecast Traffic Volume Changes



## Modeling Scenario 1

2050 Level of Service (LOS)

Moderate Congestion (LOS D)  
Severe to Extreme Congestions (LOS E, F)



## Dane County Travel Demand Model Statistics

2016 Mode Share

2050 Mode Share

Total VMT:

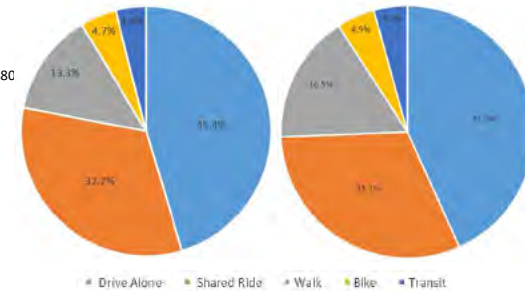
2016: 14,547,933

2050 (Scenario 1): 19,953,880

Total Daily Transit Trips:

2016: 54,499

2050 (Scenario 1): 91,758



## Drivers of Change:

What New Technology and Changing Trends May Impact How We Use the Transportation System?



## Other Plan Components

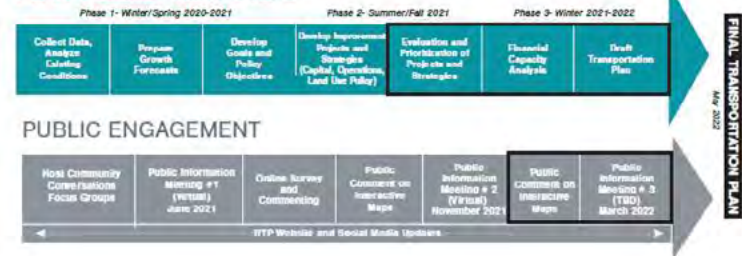




## What's Ahead?

### Regional Transportation Plan Process and Schedule

#### PLAN DEVELOPMENT STEPS



## CONNECT GREATER MADISON 2050 REGIONAL TRANSPORTATION PLAN

### Questions and Comments



### Bicycle Network?? Better for PIM 3?

#### Considerations:



## Pedestrian Network

### Considerations:



## Specialized Transportation

### Public Transit & Paratransit

- Level boarding for BRT
- Continued accessibility upgrades to Metro stops
- Network Redesign will affect *required* Paratransit service area – communities may choose to expand this area
- Local service expansion to Sun Prairie will bring Paratransit service – Shared-Ride Taxi may be discontinued

### Other Specialized Transportation

- Improved coordination between service providers and improved communication with riders (e.g. app-based)
- New Non-Profit Dane County Accessible Taxi Service adds accessible vehicles to Union Cab fleet
- Dane County Transportation Call Center merged with Aging and Disability Resource Center



## Public Information Meeting 2 - Attendee Over view:

For the second round of Public Information Meetings, the MPO held two meetings, one on November 11, 2021 at 5:30 p.m. and a meeting on November 16, 2021 at Noon. For the evening option, 10 people registered, of which five attended the meeting. For the noon option, 33 were registered to attend, of which 20 were in attendance. A recording was posted to the MPO YouTube page and received 36 views.

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# Public Information Meeting 3 - Meeting Presentation and Attendee Overview



## POLL

Who is Joining us Tonight?

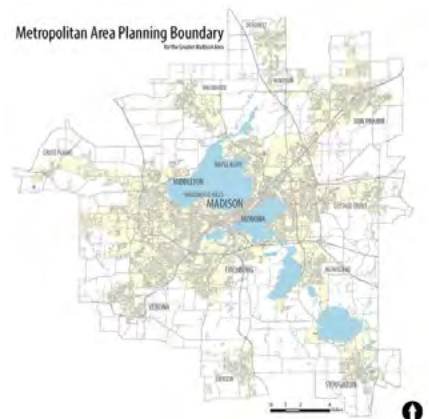
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✗ Control traffic or enforce traffic laws

✗ Operate public transit service

✗ Plan how land is used

## WHAT IS A REGIONAL TRANSPORTATION PLAN (RTP)?

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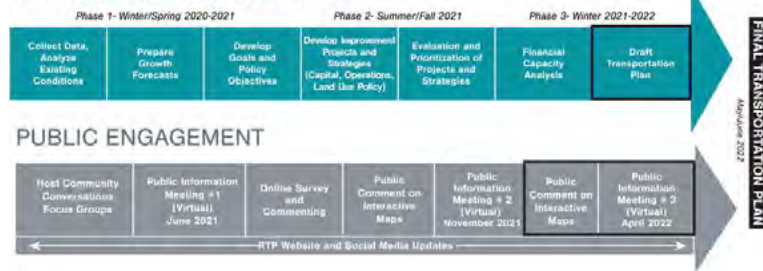
The RTP sets the framework for the future of transportation in the Madison region.

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## Regional Transportation Plan Process and Schedule

### PLAN DEVELOPMENT STEPS



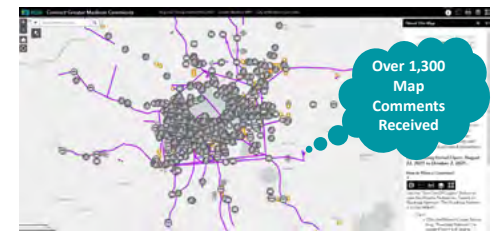
## Past Public Involvement Opportunities

- Focus groups
- Public Survey
- Interactive map commenting tool

274

Public Survey  
Respondents

"My car payment is my biggest expense. Having a car for regular use means that I have to sacrifice a lot of things... The money we spend to have that car so that we can have flexibility means that we don't have money to spend on other things like trips, meals, or fun extra activities." – Focus Group Response



## Plan Goals



### GOAL 1: LIVABLE COMMUNITIES

Create connected livable places linked to jobs, services, education, retail, and recreation through a multimodal transportation system that supports compact development patterns, increasing the viability of walking, bicycling, and public transit.



### GOAL 2: SAFETY

Ensure that the transportation system enables all people to get to where they need to go safely with an emphasis on enhanced protection for vulnerable roadway users through use of a safe systems approach, thereby helping to achieve the long-term goal of eliminating fatal and serious traffic injuries.



### GOAL 3: PROSPERITY

Build and maintain a transportation system that provides people with affordable access to jobs, enables the efficient movement of goods and services within the region and beyond, and supports and attracts diverse residents and businesses, creating a shared prosperity that provides economic opportunities for all.



### GOAL 4: EQUITY

Provide convenient, affordable transportation options that enable all people, regardless of age, ability, race, ethnicity, or income, to access jobs, services, and other destinations to meet their daily needs; engage traditionally underrepresented groups; and ensure that the benefits of the regional transportation system are fairly distributed, taking into consideration current inequities resulting from past decisions, and that environmental justice populations are not disproportionately impacted.



### GOAL 5: ENVIRONMENTAL SUSTAINABILITY

Minimize transportation-related greenhouse gas emissions that contribute to global climate change; avoid, minimize, and mitigate the environmental impacts of the transportation system on the natural environment and historic and cultural resources; and design and maintain a transportation system that is resilient in the face of climate change.



### GOAL 6: SYSTEM PERFORMANCE

Maximize the investment made in the existing transportation system by maintaining it in a state of good repair and harnessing technological advances; promote compact development and travel demand management to minimize the need for new roadway lane-miles and maximize mobility options; and manage the system to maximize efficiency and reliability.

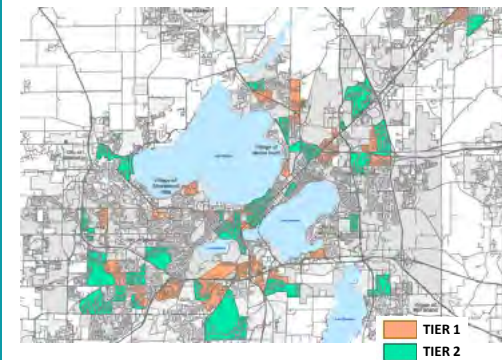
## Critical Issues



### Critical Issues:

Addressing  
Historical Racial  
Disparities and  
Ensuring Equity  
for ALL

### Environmental Justice Priority Areas





### Critical Issues:

Confronting  
Climate Change  
and  
Improving System  
Resiliency



### Critical Issues:

Supporting  
Healthy  
Communities



## 2050: Where and How Will We Grow?



Prioritize Growth  
in Centers and  
Corridors

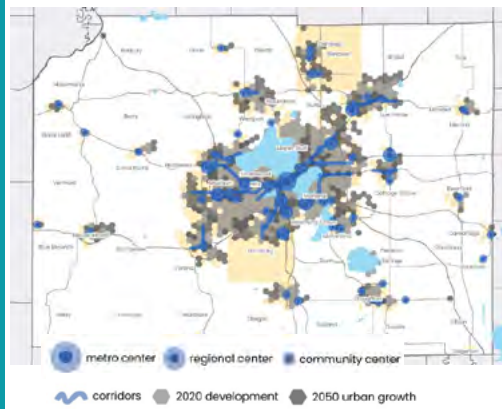
50%  
of New Households in 2050 Will Be  
In Centers and Corridors

Regional Centers and Corridors Map from  
Regional Development Framework



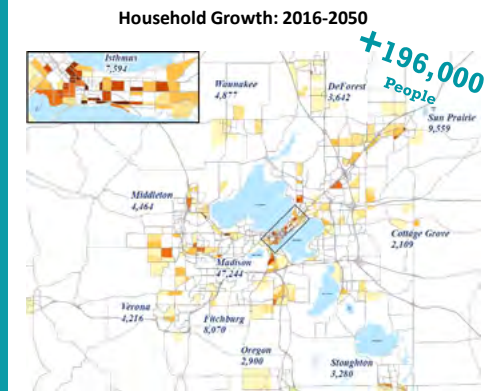
### Prioritize Growth in Infill/ Redevelopment Areas

44%  
of New Households in 2050 Will Be  
In Already Developed Areas



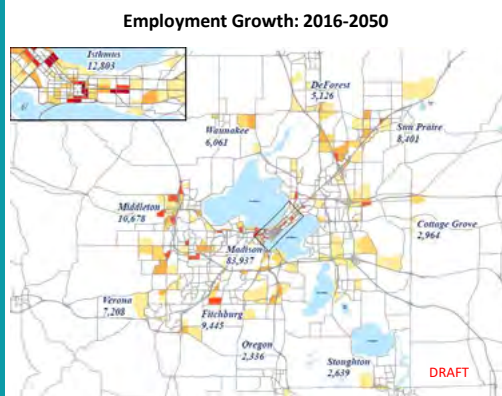
### Where Will New Households Be Added?

Dane County  
Population is Projected  
to Grow **51%** by  
2050



### Where Will New Jobs Be Added?

Dane County is Projected to  
Add Almost 100,000 New  
Jobs by 2050



### Our System Tomorrow: Needs Analysis and Recommendations





## Land Use and Transportation Integration



## Land Use/Transportation Connection

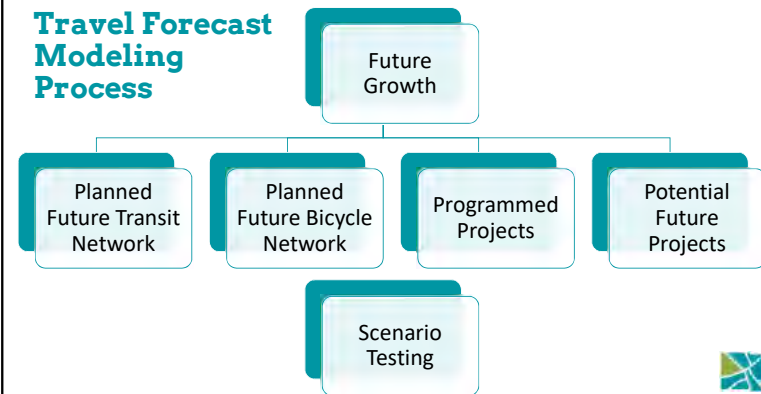
- RTP designed to support the Regional Development Framework's (RDF) vision for future growth.
- MPO recommends transportation policies and prioritizes projects for funding that support the RDF.
- For plan to be successful, however, transportation policies and investments must be coupled with local land use plans, policies and ordinances that support the RDF.

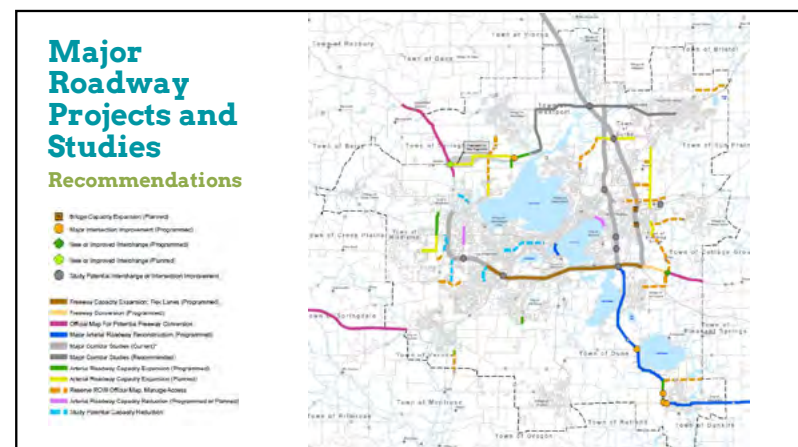
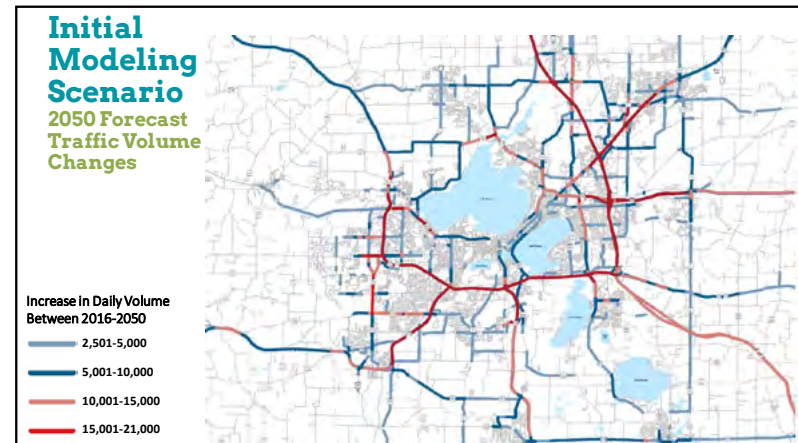


## Streets and Roadways



## Travel Forecast Modeling Process







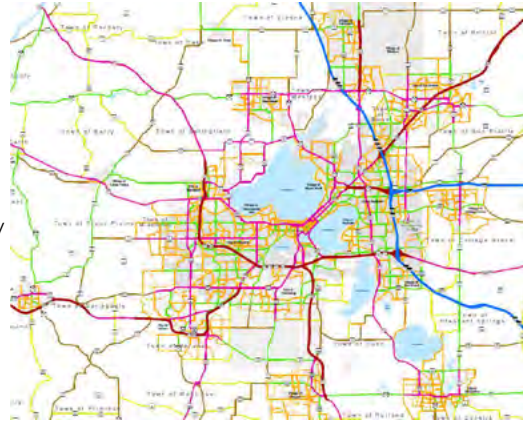
## Future Roadway Functional Classification System

### Recommendation

Construct new roadways to efficiently accommodate future growth

- Principal Arterials - Interstate
- Principal Arterials - Other Freeway
- Principal Arterials - Other
- Minor Arterials
- Collectors - Urban
- Collectors - Major Rural
- Collectors - Minor Rural

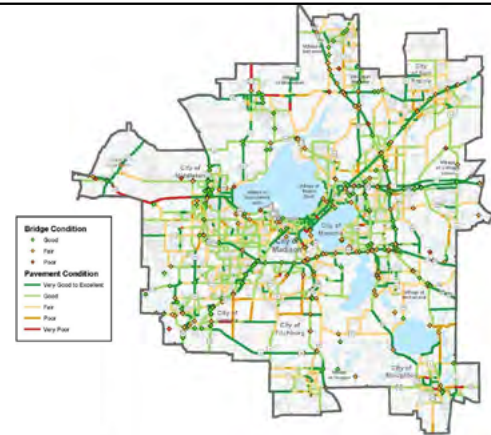
\*Dashed lines indicate future streets and segments



## System Preservation

### Recommendation

Preserve and maintain the region's street and highway system in a manner that minimizes their life cycle cost, maintains safety, and minimizes driver costs while reducing their impact on the environment



## Safety

### Recommendation

Adopt a Safe System Approach for addressing safety needs on the regional roadway system through a comprehensive "4-E" approach (Engineering, Education, Enforcement, and Emergency Services)



## TSM and Technology



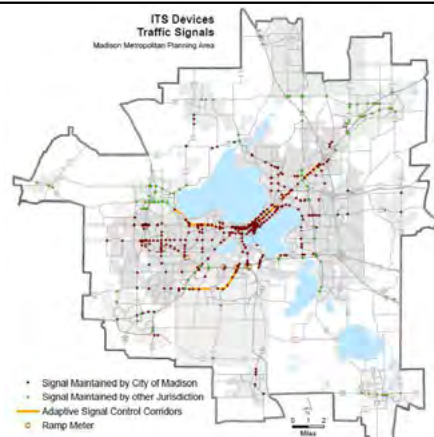


## Transportation Systems Management

### Recommendations

Develop a Regional Transportation Systems Management and Operations (TSMO) Plan.

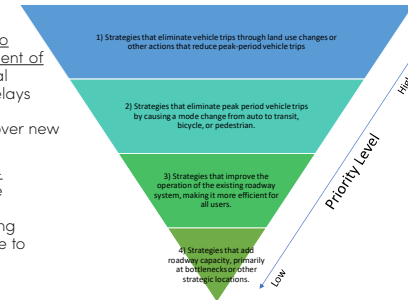
Implement and update the Regional Intelligent Transportation Systems Strategic Plan.



## Congestion Management Process

### Objectives and Priorities

- ❑ Increase system reliability for all modes to provide for the safe and efficient movement of people and goods on the region's arterial roadway network, reducing excessive delays where possible, prioritizing operational improvements of existing infrastructure over new roadway capacity expansion
- ❑ Prioritize TDM and alternatives to single-occupancy vehicle (SOV) travel to reduce roadway demand, increase equity, and minimize environmental impacts, including greenhouse gas emissions that contribute to climate change
- ❑ Support the Regional Dev. Framework



## Vehicle Electrification

### Recommendation

Promote transition towards electric vehicles to reduce greenhouse gas (GHG) emissions by developing charging infrastructure.



## Public Transit



## Network Redesign

### Draft Plan: Foundation for Regional Transit Plan

...Optimize the local bus network to maximize its utility...and complement the BRT system



## Bus Rapid Transit

The spine of the recommended future transit network



## Future Network – Service Types

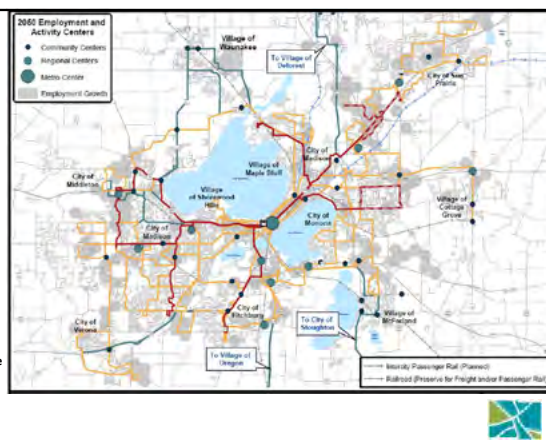
### Recommendations

Implement BRT System Vision

Implement regional express network

Add service in developing neighborhoods

- Bus Rapid Transit (BRT) Route
- BRT Route- Local Service
- Express/Commuter Route
- Local Route

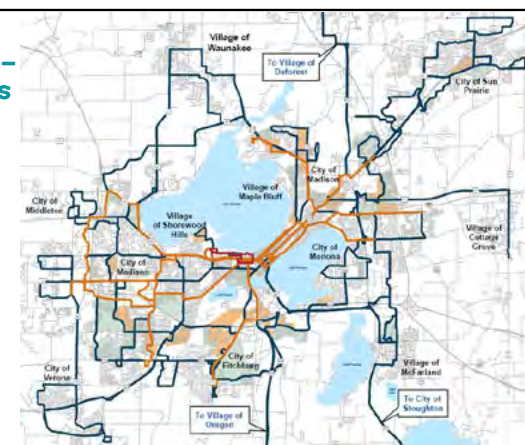


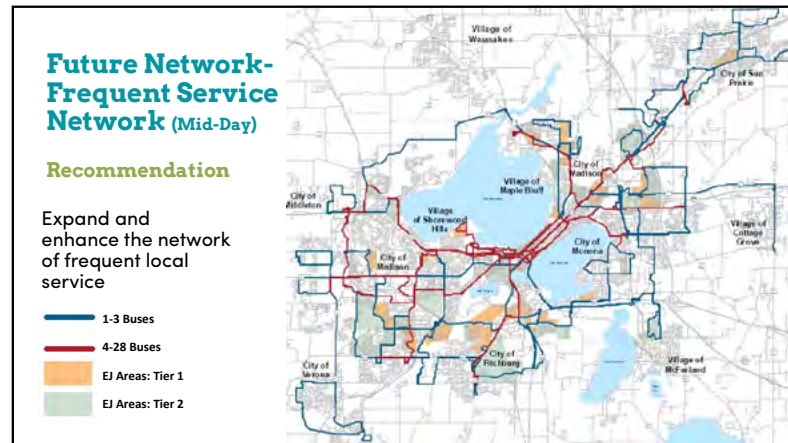
## Future Network– Route Headways (AM and PM Peak)

### Recommendation

Enhance Bus Network, Increasing Frequency

- < 15 Minutes
- 15 Minutes
- 30 Minutes
- EJ Areas: Tier 1
- EJ Areas: Tier 2





### Recommendation: Explore Other Transit Service Models Where Appropriate & Integrate with Other Transp. Options

#### Taxi/TNC\*

- Potential partnership with Metro for reduced/flat fare areas to/from transit
- Shared-ride taxi (e.g. Sun Prairie, Stoughton)



\*Transportation Network Company (Uber, Lyft, Carepool)

#### Microtransit

- Deviated route or demand-response
- Limited service area
- Contracted Service or Directly Operated



RTD FlexRide (Denver, CO)

#### Mobility Hub

- Transit access
- Taxi/TNC stand
- Micromobility options (BCycle, e-scooters)
- Covered bicycle storage, fix-it stations
- Car share (e.g. Zipcar)



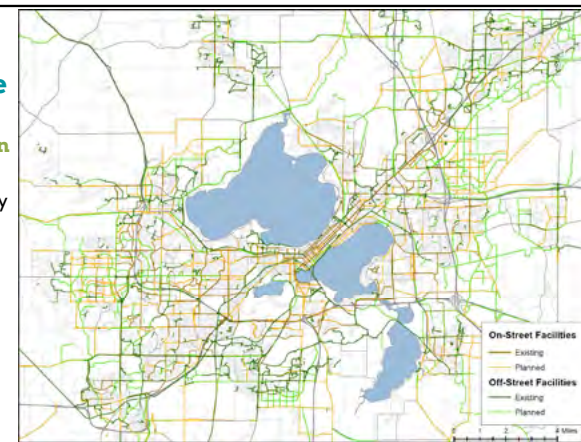
Minneapolis, MN



### Existing and Planned Bike Facilities

#### Recommendation

Expand the bikeway system with new shared-use paths and on-street facilities.

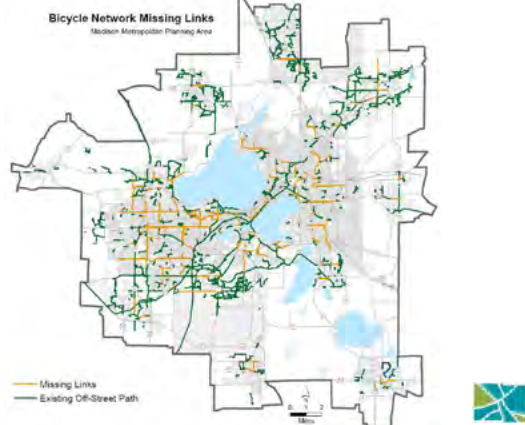




## Priority Missing Links

### Recommendation

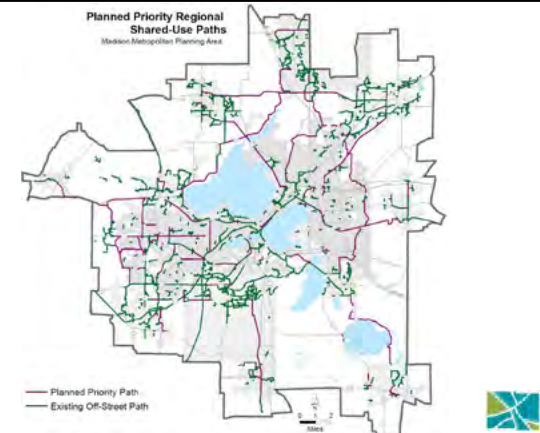
Prioritize development of connected, low stress network, filling in missing links.



## Priority Regional Paths

### Recommendation

Also focus on completing regional priority paths connecting communities and major destinations.

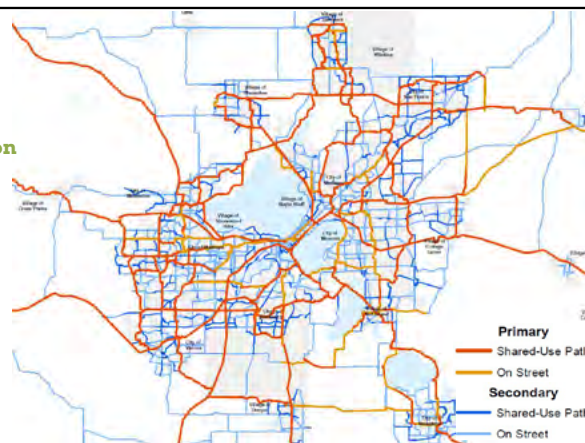


## Planned Regional Routes

### Recommendation

Provide enhanced or premium bicycle facilities in key urban arterial corridors within right-of-way where feasible.

\*Includes existing and planned future facilities.



## Pedestrian Network



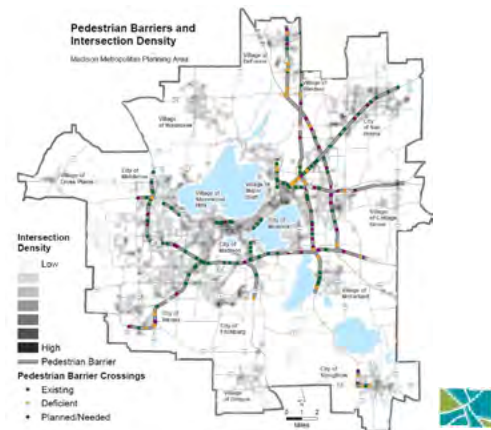
## Barriers and Crossings

### Recommendations

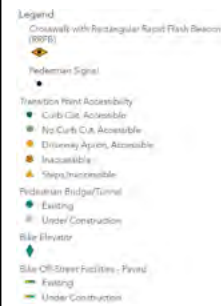
Reduce barriers to walking and bicycling.

Improve safety at intersections and crossings.

Improve accessibility of the pedestrian network.



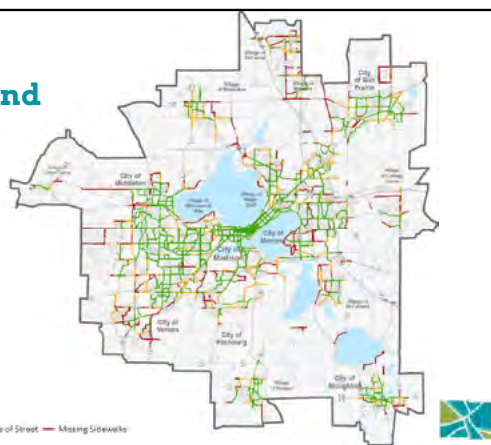
## Pedestrian Network



## Sidewalks on Urban Arterial and Collector Roads

### Recommendation

Prioritize addition of missing sidewalks on arterial and collector streets with higher demand for walking.



## Transportation Demand Management (TDM)



## TDM Recommendations

1. Develop a strategic plan for the MPO TDM program and increase capacity for regional TDM planning and programming.
2. Expand the availability and use of facilities and services that support shared mobility in the Madison region.
3. Work with municipalities, employers, and institutions to implement and promote TDM strategies.
4. Expand the availability, use, funding, and marketing of financial incentives and encouragement programs.
5. Support transportation options at schools through infrastructure and programming.



## Other Plan Components and Recommendations



## Drivers of Change

### Recommendation:

Monitor and evaluate how new technology and changing trends will impact how we use the transportation system



## Equity: Environmental Justice Analysis



## Why Community Focus Groups?

### Your experiences are important

- We have data – lots of it – but need to hear of experiences to make the numbers tell a story
- Public meetings can be dominated by particular attitudes or voices
- Small group discussions help explore issues & build understanding
- Because YOU have a unique experience of the Madison area



(Slide from RTP Focus Group Orientation)



## What we Heard

### Autos

- Private autos are expensive but often necessary
- Vehicle sharing and ride sharing are common ways to reduce personal expenses

### Transit

- Threshold for low-income passes is too low for many households struggling with transportation insecurity to qualify
- Service hours do not meet needs of many people
- Out-of-direction travel and transfers further reduce viability of using transit

### Walking

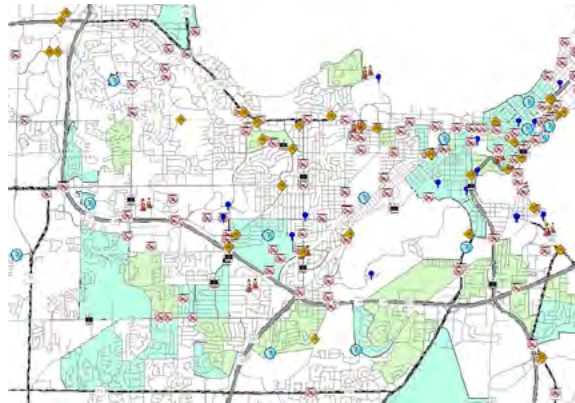
- Free and good for health, but not reasonable for long distances or when carrying groceries or accompanied by children
- Missing curb cuts, dangerous street crossings, and snow removal pose barriers

### Biking

- Incomplete low-stress network leads people to ride on sidewalks (when available)
- Inclement weather makes biking difficult without special equipment
- Street crossings are often a barrier to biking

### Interactive Map Commenting Tool for RTP 2050 Update

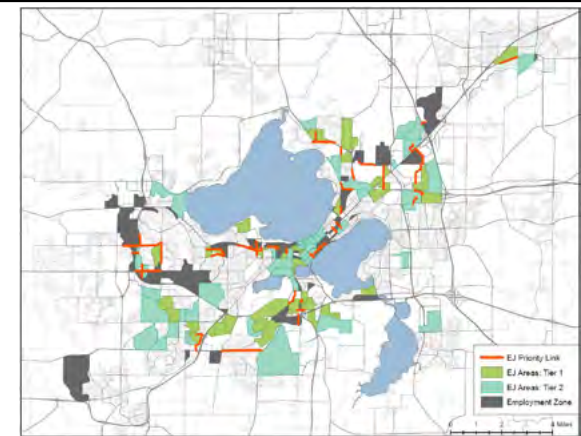
Analyzed comments in Environmental Justice (EJ) Areas and compared them to comments elsewhere

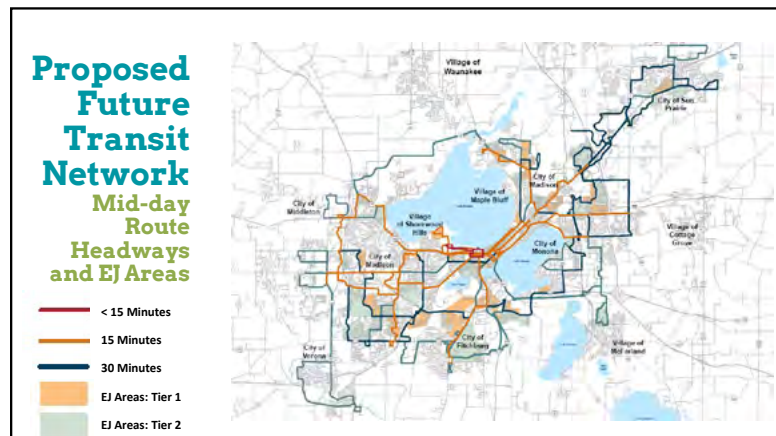
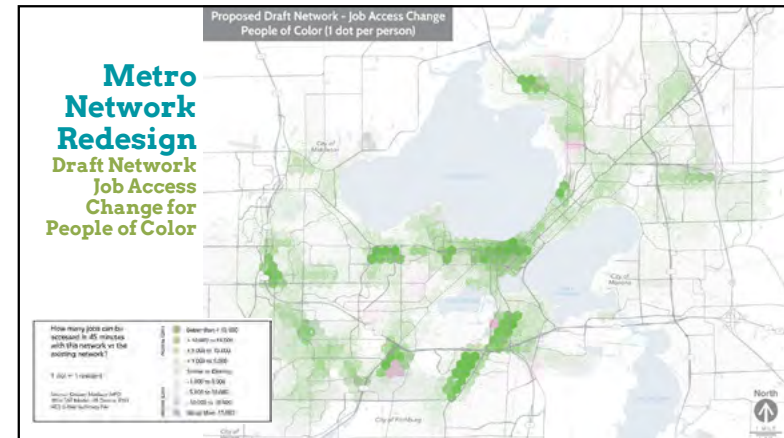
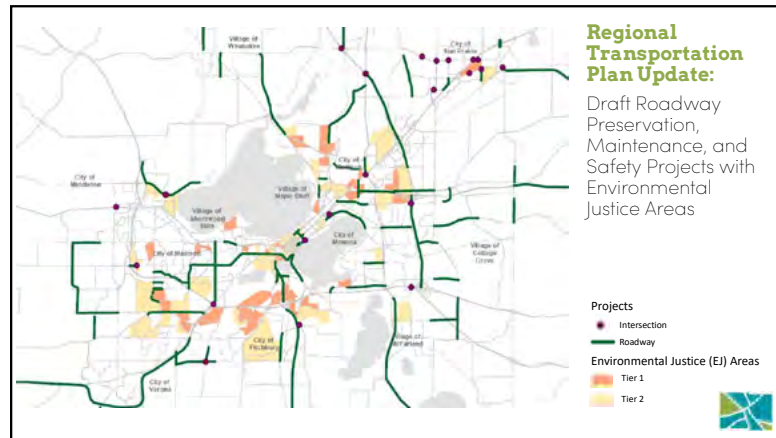


## Bicycle Network

### Missing Links

Priority links connecting environmental justice (EJ) areas with employment zones.





## Plan Evaluation Metrics

### Quantitative

- New development built in centers and along transportation corridors (RDF)
- New development built in already-developed areas (RDF)
- Vehicle Miles Traveled (per HH)
- Vehicle Hours of Delay/Vehicle Hours of Travel
- Mode of Transportation (Home-Based Work/University and Other Trips)
- Transit Ridership
- Frequent Transit/BRT Access (HHs, Jobs)
- Job Access by Mode (Transit, Bike, Auto)
- Low-Stress Bike Network

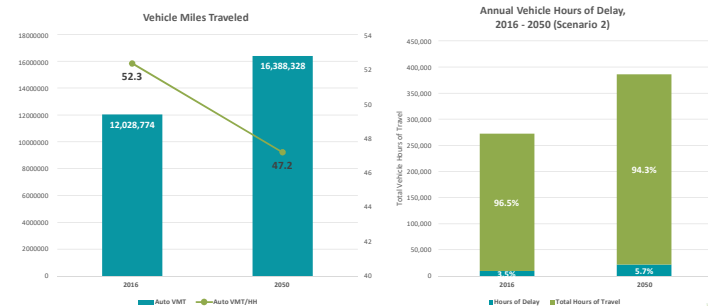
### Qualitative

- Motor Vehicle Crash Fatalities-Frequency and Rate
- Motor Vehicle Serious Injuries-Frequency and Rate
- Pedestrian and Bicycle Fatalities and Serious Injuries
- Interstate and NHS Reliability
- Truck Travel Time Reliability
- Bridge Condition
- Pavement Condition

**Other Performance Measures:** BCycle Utilization & Service Area, Transit On-Time Performance, Buses at or Past Replacement Age



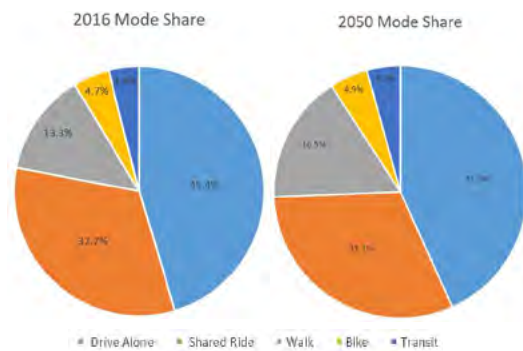
## Vehicle Miles Traveled and Delay



## Mode of Transportation and Transit Ridership

### Daily Transit Boardings

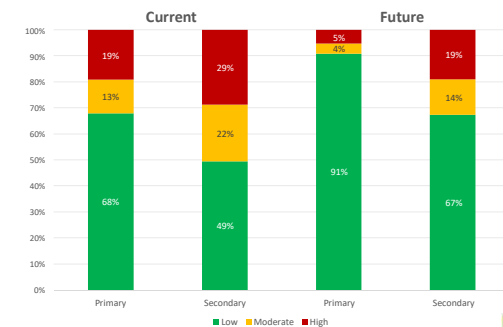
2016: 59,200  
2050: 102,700  
(74% increase)



## Bicycle Network

### Current and Future LTS on Regional Routes

Planned improvements are expected to substantially reduce LTS on the regional network.



## Funding the Plan: Fiscal Constraint



## Funding the Plan

### Fiscal Constraint

- Federal rules require that RTPs be fiscally constrained
  - Additional projects may be identified, but aren't part of the official plan if funding for them can't be demonstrated
- Purpose: Realistically assess ability to fund plan; avoid "wish list" of projects; identify new funding sources, if necessary

### Assumptions

Continuation of recent funding levels; projects currently programmed in TIP

Federal Infrastructure Bill formula funding levels assumed to continue

2% annual inflationary increases in federal and state funding

\*Note: state roadway construction funding has actually decreased 1% per year in constant dollars

4% annual increase in local roadway construction funding and 3.5% for maintenance and operations

\*Needed to account for much higher recent expenses and increase in street mileage



## Funding Conclusions



Increased state and local funding needed to reverse trend of declining roadway pavement condition



Uncertain whether all three major state highway corridor projects currently being studied (Beltline, Stoughton Rd., Interstate) could be funded



Sufficient funding for identified major local arterial roadway reconstruction projects and priority regional multi-use path projects



RTA needed to fund the full BRT system vision and much of the planned new or improved service



New transportation funding source needed to replace gas tax in future with electrification of the vehicle fleet.

## What's Ahead?





## More Ways to Get Involved

- **Project website:**  
[www.GreaterMadisonMPO.Konveio.com](http://www.GreaterMadisonMPO.Konveio.com)
  - **View past meeting recordings and public comment summaries**
  - **Interactive future system map:** Comment March 14 through April 15
  - **Draft RTP:** Comment April 7 through May 8
- Email:  
[mpo@cityofmadison.com](mailto:mpo@cityofmadison.com)



## Plan Adoption & Implementation

- **Public hearing on Draft RTP:** May 11, 6:30 p.m. (MPO Policy Board meeting)
  - Barring any major changes, the RTP will be adopted at this meeting.
- **What Comes Next?**
  - Educational resources
  - Local community presentations
  - Collaboration on local project development
  - Implementation through funding



## Questions and Comments



## Examples of MPO Equity Considerations

### Procedural Equity

- Regional Transportation Plan Update Community Focus Groups organized by contracted Community Organizations
- Translate surveys, executive summaries, and fact sheets into Spanish

### Geographic Equity

- STBG – Urban and Transportation Alternatives program scoring metrics: projects serving MPO-identified Environmental Justice Areas earn additional points
- Review construction, rehabilitation, planning, and Metro Transit service change projects for impacts to EJ Areas

### Social Equity

- Use Big Data and other sources to identify travel needs unique to particular demographic groups



## Public Information Meeting 3 - Attendee Over view:

For the third and final round of Public Information Meetings, the MPO held two meetings, one on April 7, 2022 at 5:30 p.m. and a meeting on April 12, 2022 at Noon. For the evening option, 15 people registered. A recording was posted to the MPO YouTube page.

# RTP Comment Map Summary



## RTP Comment Map – Comment Summary

12/8/2021<sup>1</sup>

As part of the second round of public participation for the Connect Greater Madison – Regional Transportation Plan 2050 update, the Greater Madison MPO invited the public to provide feedback through interactive maps of the existing transportation system in the greater Madison area. The maps were available for comment from August 23 through October 3, 2021. Participants were able to drop pins or to draw lines to indicate the location of their comment, and to select a transportation mode for the comment. Maps with comments can be viewed at <https://cityofmadison.maps.arcgis.com/apps/webappviewer/index.html?id=ac962ec7e11a4e9b9aa518ffb50bcf79>.

Map data is available for download at <https://www.greatermadisonmpo.org/maps/onlineMapping.cfm>.

### Comments by Mode

#### Safety-Flagged (627)

In addition to selecting a transportation mode relevant to their comment, respondents could choose to flag their comment as a safety concern. 48% of all comments were flagged as such; the number of safety-flagged comments is listed with each mode in the following sections.

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<sup>1</sup> Previous summaries did not include comments submitted as the “Line” type. Additionally, some comments were re-categorized by staff after initial comment summaries were released. Accordingly, comment category totals and percentages in this summary will differ from those in earlier materials and presentations.

## Pedestrian (183) (114 Safety-Flagged)

### *Accessibility – 2*

Identified barriers to accessible routes

### *Other – 14*

Corridor-wide reconstruction and design guidelines; land use suggestions; and, recreational facilities.

### *Connection – 75*

Identified gaps in network; suggested new pedestrian malls (King St, Livingston St, MLK Blvd); also suggested new or improved connections between adjacent facilities.

Concentrated in areas developed under auto-centric paradigm, but also exist in streetcar neighborhoods in near-east Madison, near-west Madison, Middleton, Fitchburg, and where highways create barriers. Few comments identify the same connection repeatedly.

### *Crossing – 88*

Identified unsafe or otherwise problematic crossings and barriers; many suggest use of RRFBs, speed tables/humps or raised crosswalks, or overly-wide crossings.

Concentrated in the Isthmus, near west, and near east of Madison, but also throughout Middleton, SW Madison, S Madison, NE Madison, Fitchburg, McFarland, Sun Prairie, and Waunakee. Locations with multiple comments include East Washington Ave corridor (14), S. Midvale Blvd. corridor (7), S. Whitney Way corridor (3), and intersection of Yuma Dr. and Cherokee Dr. (9).

### *Snow Removal – 4*

Identified locations where lack of snow removal poses issues for crossings, connections, or bus stops.

## Transit (125) (10 Safety-Flagged)

### *Other – 9*

Includes comments regarding train horns, stop consolidation, integrating Monona service, route and schedule variability, requests for water taxi/ferry, and requests for specific origin-destination pairs served by a single route (3).

*Commuter – 7*

Requests and suggestions for commuter service serving Mazomanie-Black Earth-Cross Plains (3), Mineral Point Rd. west of the Beltline (2), McFarland, and North Madison.

*Coverage – 10*

Requests for service to peripheral areas; some request return of pre-Covid service, others request new or continued service.

*Inter-City and Rail – 58*

Majority of comments suggest a light rail/commuter rail station location (50 + 1 negative); some request service to Milwaukee or Chicago (3); suggested rails with trails facilities (2); shuttle to Amtrak in Columbus; and, grade separation of RR tracks.

*Ridership – 6*

Requests for increased service frequency to increase capacity and usefulness of service.

*Specific Route or Stop – 35*

Stop comments include problems with access to stops, level of infrastructure or amenities.

Route comments include requests for particular amendments to routes, changes to schedule or frequency, and desire for service in the Gammon Rd. corridor. There were also comments regarding adding or eliminating bus-only lanes. Comments on specific routes include:

- Route 19 (re-establish) (8)
- Route 55 (increase frequency)
- Route 70 (increase frequency, existing loop is inefficient)
- All buses/BRT off State Street (4) [*these were entered as Pedestrian comments and re-categorized as Transit comments by staff*]

*Bike (480) (253 Safety-Flagged)**BCycle – 27*

Requests for new BCycle docks. About half of the suggested locations are within the current BCycle “service area.” The rest represent modest expansions, e.g., Whitney Way & Odana Rd. and the airport.



*Need New or Improved Facility – 333*

Comments regarding needed facilities and suggested improvements are scattered throughout the county and are most heavily concentrated in the Cities of Madison and Middleton. Many comments along the John Nolen/Capital City Path corridor, University Avenue (downtown to Whitney Way), Atwood (Olbrich to Cottage Grove Rd), and Century Ave. in Middleton.

*Road Design - 18*

Nearly all comments are located in the City of Madison. Common themes include dangerous curves, dangerous merging conditions (often where bike lane or shoulder ends, or where parking begins), parking, and blind corners.

*Crossing – 54*

Comments are largely concentrated in Madison. Common themes include motorist behavior (speeding, not yielding to bikes), traffic signal problems (bikes not detected, hard to reach button), overly long waits at intersections where bikes require two light cycles to cross.

*Maintenance – 24*

Common themes include poor pavement condition (both on paths and bike lanes), inadequate snow removal, encroaching foliage, and path/tunnel flooding problems.

*Other – 24*

Wide variety of comments. Common themes include requests for better speed limit enforcement, suggested policy changes (e.g., allow bikes to yield on red), and requests for additional signage.

*Roadway (487) (250 Safety-Flagged)**Design – 310*

Complete Streets, road diet, traffic calming, and comments suggesting pedestrian-only areas accounted for 25% of roadway design comments. Suggested new roadway connections, including Beltline Relievers and other bypass routes around communities, accounted for 13 % of Design comments. The design of intersections, interchanges, and their attendant features (e.g. roundabouts, stop signs, turn lanes) were the subject of 32% of design comments. 15% of design comments related to how traffic flows through a corridor, including lane drops, roadway width, weaving behavior, and lane configuration such as suggestions for use of Two-Way Turn Lanes (TWTL).

#### Maintenance – 40

Maintenance comments generally indicate areas where lane markings are needed or have worn away, and/or where surface condition is poor.

#### Operations, Signals, Safety, and Speeding<sup>2</sup> – 124

Comments regarding roadway operations compose 67% of these comments, and range from turning movement problems, merging/weaving, signal timing, transit lanes, and traffic control devices.

Safety-related comments account for 11% of these comments, and almost universally relate to the operation of intersections and/or drivers ignoring traffic control devices at intersections. *Note that these are comments which staff categorized as “safety” comments for lack of a better category; many comments in other categories also relate to safety. See Safety-Flagged comment numbers.*

Speed-related comments that did not mention particular remedies (e.g. traffic calming, road diet) account for 22% of these comments. Of these, 37% favor increasing speed limits on one or more roadways and 59% favor reducing speed limits on one or more roadways; one suggested that the posted speed limit is irrelevant without enforcement but did not suggest changing speed limits, and one suggested (hopefully sarcastically) that speed limits should be increased as a means of ensuring human sacrifices for the gods.<sup>3</sup>

#### Other – 10

Other comments were generally not transportation-related, with 60% of them regarding land use. 20% of Other comments are in regard to the difficulty in making multi-modal connections to and from Dane County Regional Airport.

### Environmental Justice Area Comments by Mode

Comments were reviewed as they applied to areas within or directly adjacent to MPO-defined Environmental Justice (EJ) areas ([Tier 1 and 2](#)).

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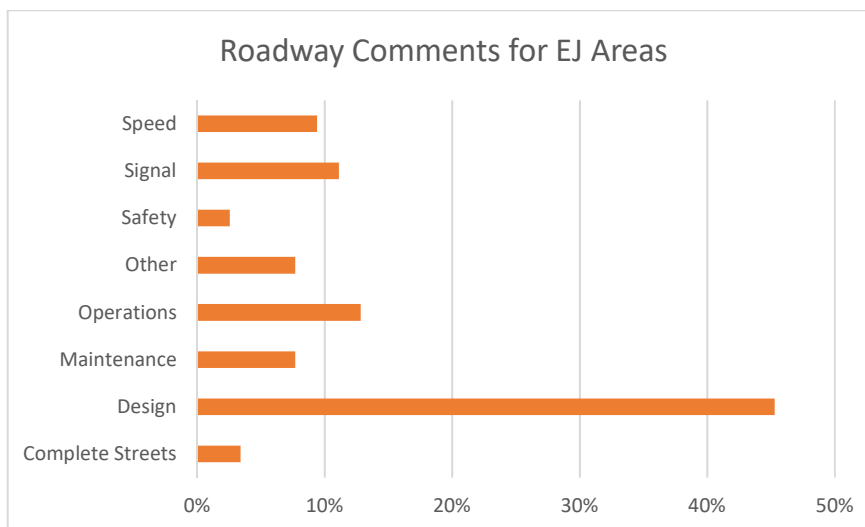
<sup>2</sup> Speed is grouped with other operational comments, as it is an operational symptom of design.

<sup>3</sup> “Increase vehicle speeds so Madison can have its own Tzompantli only of traffic fatalities”

### Roadway

487 comments were received regarding the roadway network; 24% of these comments were pinned to the map in or directly adjacent to EJ areas. As shown in Figure 1, comments regarding roadway design accounted for nearly half of all roadway comments, while no other categories had more than 13% of roadway comments associated with them.

Figure 1: Roadway Comments for EJ Areas

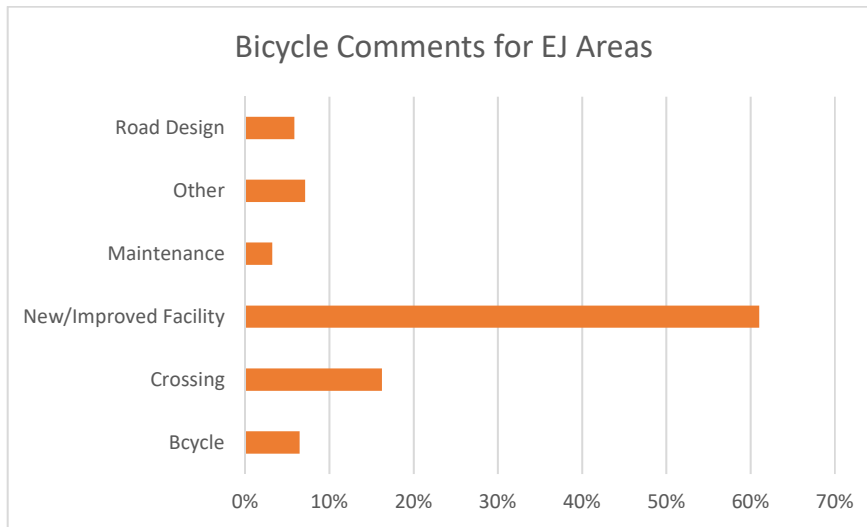


Although less than ¼ of roadway comments were pinned in or adjacent to EJ areas, 100% of non-railroad noise-related comments were pinned to or adjacent to EJ areas, and 44% of all speed-related comments were pinned to or adjacent to EJ areas. Comments requesting capacity expansion/lane addition projects on the Beltline and the I-39/90/94 corridors would result in disproportionate noise and air quality impacts to adjacent EJ areas.

### Bicycle

480 bicycle-related comments were submitted, 32% of those were “pinned” to or adjacent to identified Environmental Justice areas. 61% of EJ-area bicycle comments were in regard to needed new or improved facilities and an additional 16% were in regard to street crossings (Figure 2).

Figure 2: Bicycle Comments for EJ Areas



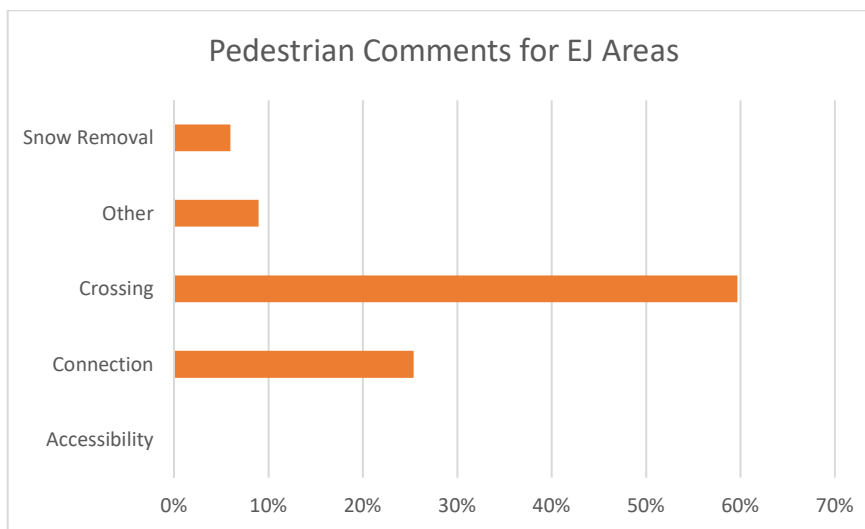
Although less than 1/3 of bicycle comments were pinned to or adjacent to EJ areas, 50% of the Road Design, 46% of the Crossing-related and Other<sup>4</sup> Bicycle comments were pinned to or adjacent to EJ areas.

<sup>4</sup> Other comments include need for enforcement (33%) and positive feedback on existing facilities (25%).

### Pedestrian

183 pedestrian-related comments were received through the interactive map commenting tool; 37% of these were “pinned” to or adjacent to identified Environmental Justice areas. As shown in Figure 3, 60% of these comments were in regard to roadway crossings, and 25% were in regard to missing connections in the pedestrian network.

Figure 3: Pedestrian Comments for EJ Areas



Although only 37% of pedestrian comments were pinned to or adjacent to EJ areas, 45% of crossing comments and 43% of Other<sup>5</sup> pedestrian comments were pinned to EJ areas. 100% of snow removal comments were pinned to or adjacent to EJ areas.

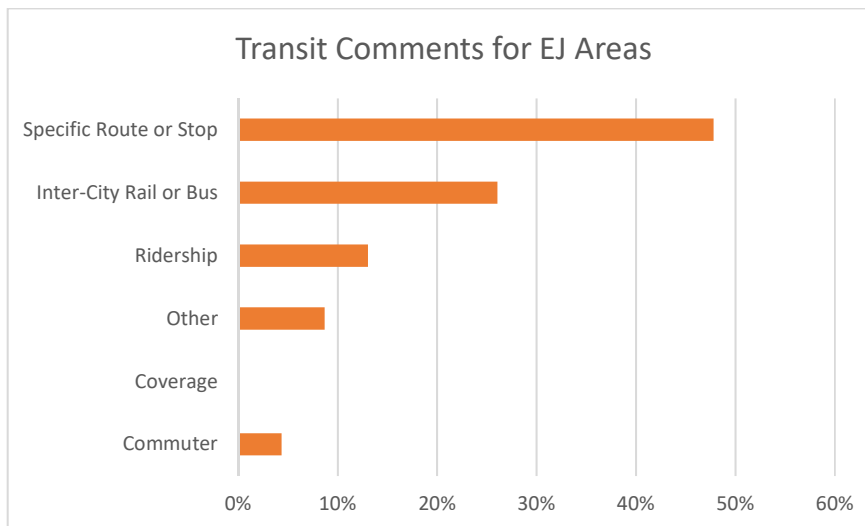
<sup>5</sup> Interestingly, one-half of the Other pedestrian comments for EJ areas suggest complete redesign and reconstruction of the Regent St. corridor near the UW-Madison campus; other comments in this category included questions about existing facilities and that Century Ave. in Middleton is unpleasant to walk along in inclement weather.



### Transit

125 transit-related comments were received, 18% of these were “pinned” to or adjacent to identified Environmental Justice areas. 48% of these were in regard to a particular route or stop, and 26% were in regard to inter-city bus or rail service. Based on the Ridership/Coverage tradeoff investigated in the Metro Transit Network Redesign, 13% of EJ-area transit comments support transit service modifications that would improve ridership, while no EJ-area comments supported service modifications that would improve coverage – although 4% supported provision of commuter/peak-period service. (See Figure 4)

Figure 4: Transit Comments for EJ Areas



Although only 18% of transit-related comments were pinned to or adjacent to EJ areas, 50% of comments interpreted to support a network that focuses on being useful to many people, with high service frequencies in specific corridors or other features such as stop consolidation and improved route directness were pinned to EJ areas. 31% of all comments regarding a specific route or stop were pinned to an EJ area.

## Outreach Methods:

Through every public involvement phase of the plan, outreach was done to engage the public and stakeholders and bring awareness to public involvement meetings, interactive comment maps, and other opportunities to provide public feedback. Press releases were distributed prior to each phase of public involvement, some of which were advertised through local news agencies. One such example is included in the following pages. Opportunities for comment and public involvement meetings were regularly communicated through Facebook posts. Finally, a public hearing for draft plan was conducted on May 11 and a public hearing notice was posted to the MPO's website and can be found in the following pages.

## DANE COUNTY | TRANSPORTATION

## Map your wishes: Dane County transportation planners launch interactive map for feedback

Chris Hubbuch | Wisconsin State Journal  
Aug 25, 2021



Chris Hubbuch | Wisconsin State Journal

**M**adison-area planners are looking for input on the region's transportation network.

## Public Hearing Notice

The Greater Madison MPO (Metropolitan Planning Organization) will conduct a public hearing on the Draft Connect Greater Madison Regional Transportation Plan 2050. The Regional Transportation Plan (RTP) is the MPO's framework plan covering all modes of transportation. It sets guiding policy and identifies future projects, studies, and strategies to be implemented. It is the official plan for Federal funding purposes. Comments are invited on the draft plan.

### Public Hearing

Wednesday, May 11, 2022

6:30 p.m.

Virtual Meeting via Zoom

[Note: See agenda when posted [here](#) for link and information on how to register to speak.]

Additional opportunities to learn about and provide input on the draft plan include the second of the final round of virtual public meetings on April 12 (see below) and [an interactive comment map of the draft future transportation network](#), available through Friday, April 15.

### Phase 3 Public Meetings: Connect Greater Madison: Regional Transportation Plan 2050

Staff will provide a presentation on the draft RTP goals, recommendations, performance measures, and future transportation network maps, and there will be time for Q&A.

RTP Public Meeting #3 ([daytime option](#)): Tuesday, April 12, 12:00-1:00 p.m. – virtual – [Register Here](#)

Written comments will be accepted through Sunday, May 11, 2022 through the Plan website at the link below, by email to [mpo@cityofmadison.com](mailto:mpo@cityofmadison.com), or by mail addressed to the MPO office located at 100 State Street, Suite 400, Madison, WI 53703.

The draft Regional Transportation Plan 2050 document is available on the Plan website at the following link:  
<https://greatermadisonmpo.konveio.com/>





## Draft RTP Comment Summary

5/9/2022 Summary

As part of the third round of public participation for the Connect Greater Madison – Regional Transportation Plan (RTP) 2050 update, the Greater Madison MPO invited the public to provide feedback on the draft RTP. The draft Recommendations and Supporting Actions were published to the project web site on March 23, the draft chapters and all but one draft appendix were published on April 15, and the last Appendix (B) was published on April 20, 2022. The comment period was open through May 8, 2022.

Eighteen comments<sup>1</sup> were submitted on the draft Recommendations and Supporting Actions, and 35 comments were submitted on the draft Plan (which includes the Recommendations in Appendix A). All comments are combined in the following summary.

### Transportation Networks - 30

#### *Bikes – 11*

Four comments were in regard to design standards (e.g. protected bike lanes v. standard lanes, separated paths v. shoulders on rural roads) and their applicability. One was a question about how a recommendation would be implemented, one suggested working towards year-round bicycle share operation, and one suggested including research into innovative ways to improve bicyclist safety as a supporting action. Two comments supported building out the low-stress network. Two bicycle comments were observations.

#### *Roadway – 4*

One comment argued that the North Mendota Parkway and a similar southern bypass route “should be rejected in the current plan as it contradicts one of the 6 key goals of limiting sprawl”.<sup>2</sup> One agreed that capacity expansion should be the option of last resort, another asked if the high number of short trips on the

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<sup>1</sup> Two comments are not included in this total, and are not discussed further in this summary: One of them posed a question about the content of a particular map, and the other comment clarified that the reviewer had resolved their question.

<sup>2</sup> Although none of the six goals of the RTP specifically mention sprawl, Goal 1 Livable Communities, Goal 3 Prosperity, Goal 5 Environmental Sustainability, and Goal 6 System Performance all relate to the built environment in a way that discourages sprawling development patterns.



Beltline could be addressed through design improvements, and the last spoke to the need for roadway designs to change in order to influence driver behavior/speeding.

#### *Pedestrian – 4*

One comment each suggested changes to pedestrian facility recommendations, suggested that traffic calming be implemented on all streets to improve pedestrian safety, called out Stoughton Rd as a pedestrian barrier, and recognized that all trips begin and end as pedestrians regardless of mode(s) used for the rest of the trip.

#### *Access to Dane County Regional Airport – 3*

Two comments suggested improving bicycle and transit access to the airport, and one asked why the North-South BRT is not shown serving the airport (a Locally Preferred Alternative has not been identified for this route yet, so it is not shown on the map).

#### *Passenger Rail – 2*

Two comments supported prioritizing planning for inter-city passenger rail.

#### *Intercity Bus – 2*

One comment decried that intercity bus service has not been improved, and has even declined as a result of the COVID-19 pandemic, and another spoke to the importance of a bus terminal with passenger facilities.

#### *Transit – 2*

One comment spoke to the importance of connecting employment centers with robust transit service, and another called for increased funding of transit.

### *TDM, Parking, and Land Use - 19<sup>3</sup>*

#### *Parking Requirements – 7*

Seven comments suggested eliminating parking requirements for new and existing developments, one of which also suggested adopting parking maximums in some areas.

#### *Multimodal Access - 4*

Two comments suggested referred to the importance of secure, covered bicycle parking to a multimodal system, one called out the importance of strong multimodal options being an economic driver and an important factor in attracting a workforce, and another spoke to the equity considerations of the cost of vehicle ownership and maintenance for those who do not have access to other modes for their desired trips.

<sup>3</sup> One comment suggested eliminating parking requirements as well as suggesting changes to parking management; it is counted once in each of those sub-categories, but only once in the overall Parking category.

*Parking Management – 2*

Two comments suggested changes to parking pricing structures (including free parking) that promote driving.

*Park and Rides – 2*

Two comments were submitted in support of park and rides and transit access to them; Middleton (CTH M/Century at Allen) and Dutch Mill were called out in particular.

*Transit Oriented & Mixed Use Development – 2*

Two comments spoke to the importance of developing dense, mixed-use, transit-oriented communities to support the use of travel modes other than single-occupant vehicles.

*Other TDM – 3*

One comment spoke to the importance of TDM in reducing single occupant vehicle trips across the isthmus and through downtown, one spoke to the impact of reducing VMT on the importance of other modes, and another called for making TDM a key strategy in reducing single occupant vehicle use.

*Other – 5*

Two comments spoke to the need for improved driver education of how to relate to bicyclists safely. One comment asked if the high percentage of short walks in peripheral communities could be related to telecommuting, one pointed out that using rideshare services (TNCs) does nothing to reduce VMT and may actually be worse than driving single-occupant vehicles unless rides are shared with other passengers, and another called out an instance where the travel demand model projected mode share is not listed in the draft RTP (this projection will be added after the scenario has been re-run, due to error in original network coding).

May 5, 2022

## *Connect Greater Madison Regional Transportation Plan 2050 Update*

### Addition/Change Sheet

#### *Chapter 4 – Our Transportation System Tomorrow*

Revise Map 4-a (p. 4-14) “Future Roadway Functional Classification System” in Verona and Sun Prairie based on staff comments as follows:

- Realign Shady Oak Ln. to intersection of Northern Lights Rd.
- Remove planned extension of Paulson Rd. between Shady Oak Ln. and Woods Rd.
- Add planned road from intersection of Stony Ridge Cir. and Rock Ridge Ct. to CTH PD
- Remove planned road between Meriter Way and Prairie Oaks Dr.
- Remove planned road between Northern Lights Rd. and Country View Rd.
- Revise road alignment near Verona High School, and add planned road from Verona High School area to Valley Rd.
- Remove planned road between Verona High School area and STH 69
- Revise planned road alignment between Shady Bend Rd. and Whalen Rd.
- Realign Valley Rd. south and onto Pine Row Rd to shift Valley Rd-STH 69 intersection south
- Add Clar Mar Drive extension to Bailey Road
- Add Summerfield Way extension to Clar Mar Drive.

Add the following footnote to item #2 on page 4-25: “Due to differing schedules of the RTP Update and the Metro Network Redesign, the RTP proposed future transit network was based on an alternative network that was designed in order to elicit feedback, not to be implemented. The Madison Transportation Policy and Planning Board (TPPB) directed staff to develop a draft transit network based on the Ridership Alternative with improved coverage; the proposed future transit network is consistent with that direction but does not incorporate most of the changes incorporated into the draft network currently being considered due to conflicting project schedules. However, the planned local routes are intended to be conceptual.”

Revise Map 4-j (p. 4-40) “Planned Future Bicycle Network Functional Class” as follows per comments from Verona staff:

- Realign the Old PB path to parallel Old PB/PB on west side of the roadway north of CTH M
- Add planned path on CTH M from CTH PB to Thousand Oaks/Liberty Dr.

May 5, 2022

- Remove planned sidepath on Lincoln St. from southern terminus to Holiday Ct., on Holiday Ct, and extending east from Holiday Ct. to bridge over Badger Mill Creek.

Revise Map 4-l (p. 4-42) “Planned Priority Regional Shared Use Paths” to realign the Old PB path to parallel Old PB/PB on west side of the roadway north of CTH M based on comments by Verona staff.

Revise Figure Fig 4-i (p. 4-43 – 4-44) “Bicycle Recommendations and Supporting Actions” to add new supporting actions 5C and 5D and add text to supporting action 6C based on public comments:

5C: “Research and adopt innovative safety treatments.” / New / WisDOT, MPO, local governments.

5D: “Support local efforts to identify corridor level systemic safety improvements, and work with WisDOT to identify changes to safety program criteria to allow funding of such projects.” / New / WisDOT, MPO, local governments

6C: add “...as well as exploring potential year-round operation.”

Revise Figure 4-l (p. 4-55) “Parking Recommendations and Supporting Actions” to add new supporting actions 1E and 2D and revise supporting action 2C based on public comments:

1E: “Discourage employer-subsidized parking, or if parking is subsidized, encourage employers to provide a financial incentive of at least equivalent value to employees who forgo single-occupancy parking, such as parking cash-out or multimodal benefits.” / New / employers

2C: New text: “Conduct a regional study on parking to assist communities in adequately pricing and right-sizing parking requirements and facilities.”

2D: “Encourage unbundled parking in new residential and commercial developments, priced at market rate, to distribute the cost of parking equitably.” / New / private owners

Revise Figure 4-n (p. 4-59 – 4-60) “Freight, Air, and Rail Recommendations and Supporting Actions” to add new recommendation 7 based on public comments: “Improve multi-modal access to airports” / New / Dane County, local governments, Metro

## *Appendix A*

Revise Figure A-b (p. A-3) “Arterial Street/Roadway Improvements: Potential Capacity Improvements” to add planned capacity expansion to CTH M (CTH PB to Liberty Dr) in response to discussions with Verona staff; estimated Construction Cost: \$1,613.

May 5, 2022

Revise Figure A-d (p. A-6 – A-7) “Arterial Street/Roadway Improvements: Potential Arterial System Preservation, TSM, and Safety Projects” based on public comments and discussions with City of Sun Prairie staff to add:

- Egge Road/USH 151 Interchange Study
- Egge Road extension (CTH N to USH 151) as new two-lane roadway project; estimated construction cost: \$5,953
- Egge Road (CTH N to CTH C) as reconstruction to urban cross section project; estimated construction cost: \$10,487

Revise Figure A-m (p. A-25 – A-26) “Pedestrian Recommendations and Supporting Actions” to clarify intent, based on comments from WisDOT Planning staff and the public to replace text for supporting action 2E with, “Identify and install accessible pedestrian signal systems and other ADA accessibility treatments where they are missing.”

Revise Figure A-q (p. A-32 – A-33) “Air, Freight, and Rail Recommendations and Supporting Actions” based on comments from WisDOT Planning staff to add “OCR, railroad companies” as implementing parties for supporting actions 5A, 5B, and 5C.



# Appendix 3 - Crash Profile Memo



To: Colleen Hoesly, Greater Madison MPO  
From: Alta Planning + Design  
Date: August 2023  
Re: Task 2.2 Crash Profiles

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## Crash Profiles by Mode

Through an examination of crash characteristics and contextual factors, the most pertinent crash trends were identified for further analysis through “crash profiles.” Crash profiles highlight specific conditions that account for a large share of fatal and serious injury crashes in the Madison region.

The following sections describe the specific crash profiles identified by mode for the Madison region, summarized below in **Table 1**. For each profile, the associated crash and contextual factors are described, as well as the number of crashes that match the described circumstances. Crash severities are summarized at three levels:

- All crashes
- Injury/fatal (FI) crashes (excludes property damage only)
- Severe injury/fatal (KSI) Crashes (KABCO injury level K or A<sup>1</sup>)

FI crashes are tabulated to align with the previously completed high injury network analysis and KSI crashes are included to emphasize profiles with the highest number of the most severe crashes. **Table 2** shows the number of crashes by mode for each tabulation level.

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<sup>1</sup> More information on the KABCO injury code definitions can be found here:  
[https://safety.fhwa.dot.gov/hisp/spm/conversion\\_tbl/pdfs/kabco\\_ctable\\_by\\_state.pdf](https://safety.fhwa.dot.gov/hisp/spm/conversion_tbl/pdfs/kabco_ctable_by_state.pdf)

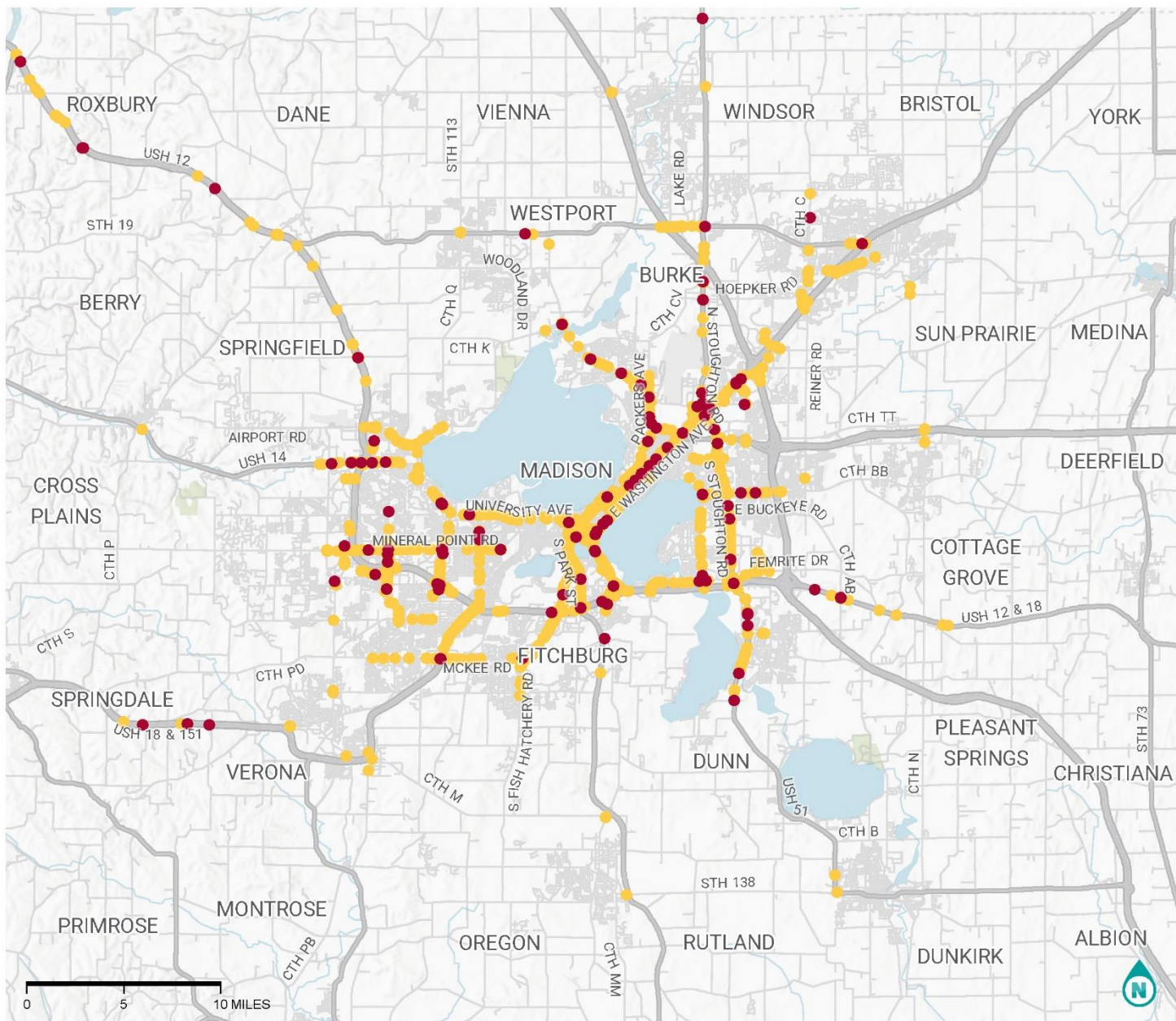
Table 1. Summary of Crash Profiles

Profile Name	Mode	Number of FI Crashes	% of Modal FI Crashes	Number of KSI Crashes	% of Modal KSI Crashes
<b>Vehicles</b>					
Multi-Lane Arterials	Vehicle	2,049	32%	121	27%
Turning Vehicles at Signalized Intersections	Vehicle	775	12%	47	11%
Roadway Departure in Rural Areas	Vehicle	293	5%	53	12%
<b>Bicyclists</b>					
Signalized Intersections	Bicycle	76	18%	8	16%
Uncontrolled Intersections	Bicycle	25	6%	8	16%
Roads Without Bike Infrastructure	Bicycle	91	22%	12	25%
Multi-Lane Arterials	Bicycle	65	16%	12	24%
<b>Pedestrians</b>					
Commercial Areas	Pedestrian	136	35%	29	27%
Multi-Lane Arterials	Pedestrian	84	21%	31	29%
Pedestrian Hit & Run Crashes	Pedestrian	41	10%	16	17%
Unmarked Mid-Block Crossings	Pedestrian	66	17%	12	11%

Table 2. Summary of Crashes by Mode and Injury Severity

Mode	All Crashes	FI Crashes	% FI Crashes	KSI Crashes	% KSI Crashes
Vehicle	27,684	6,338	23%	447	2%
Bicycle	454	412	91%	49	11%
Pedestrian	416	391	94%	106	25%
All Modes	28,554	7,141	25%	602	2%

Crashes occur across the MPO region, with different collision profiles concentrated throughout. The following maps identify where crashes aligning with each crash profile occurred during the study period. Each map is accompanied by a table to highlight the number and type of crashes contributing to each profile. Crash profiles are organized by mode, starting with vehicle crashes.



Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab.

### VEHICLES ON MULTI-LANE ARTERIALS

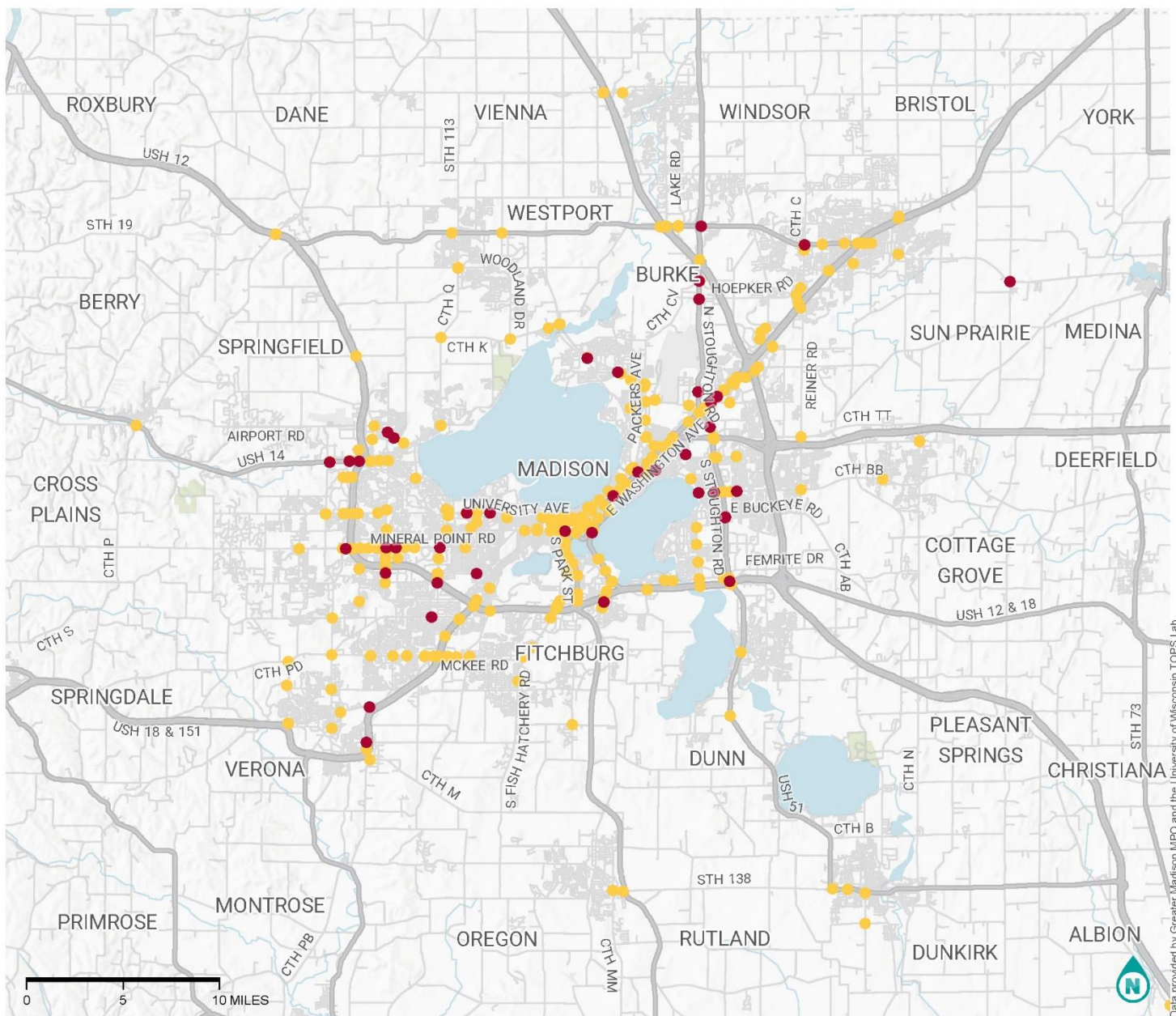
This profile analyzes crashes that resulted in a severe or fatal injury on multi-lane arterials with posted speed limits of 30 mph or greater.

### CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
8,083	29%	2,049	32%	121	27%	20%





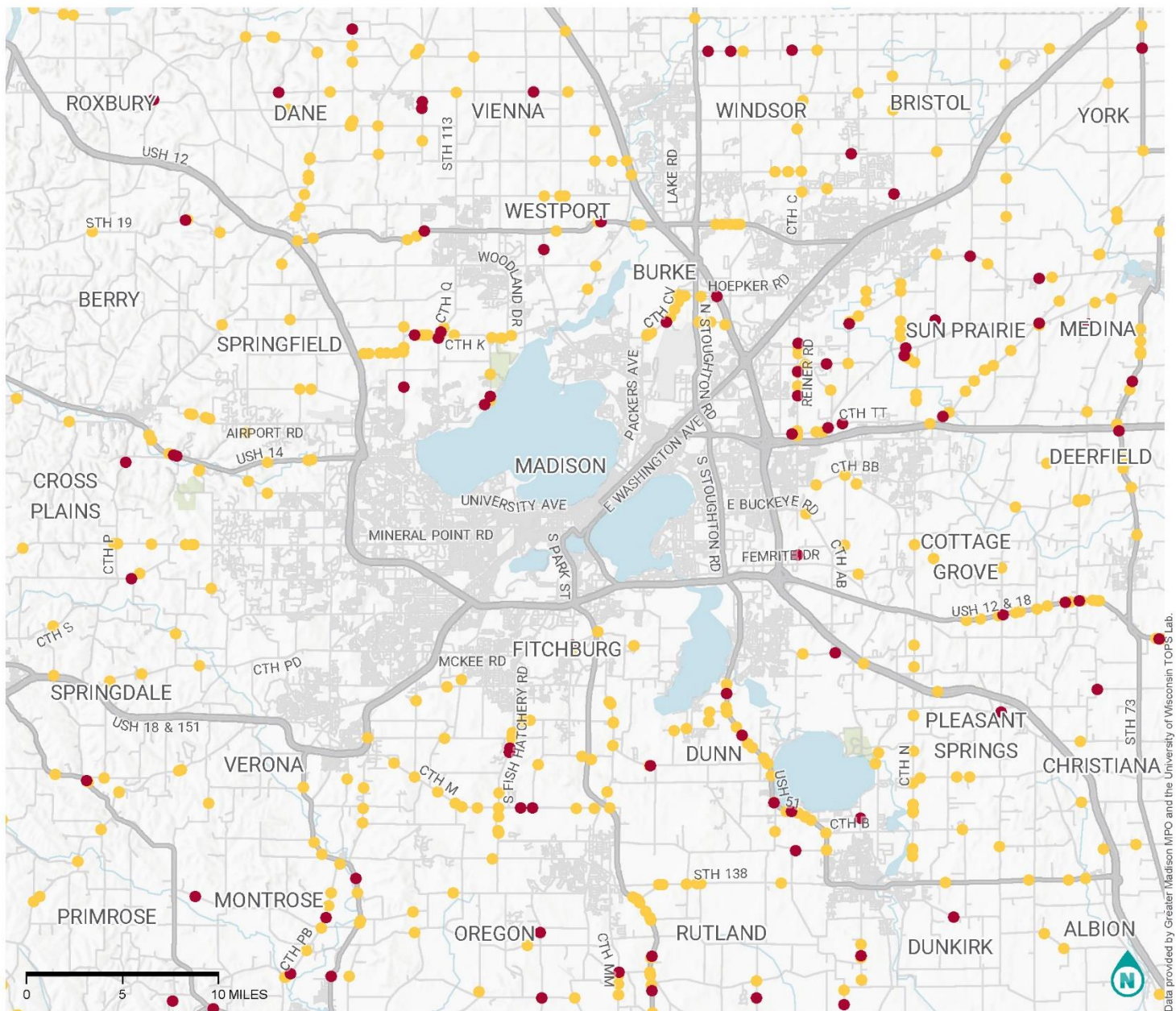
## TURNING VEHICLES AT SIGNALIZED INTERSECTION

This profile analyzes crashes that resulted in an injury from a front-to-side vehicle crash at a signalized intersection.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
1,918	7%	775	12%	47	11%	8%



Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab.

## RURAL ROADWAY VEHICLE DEPARTURE

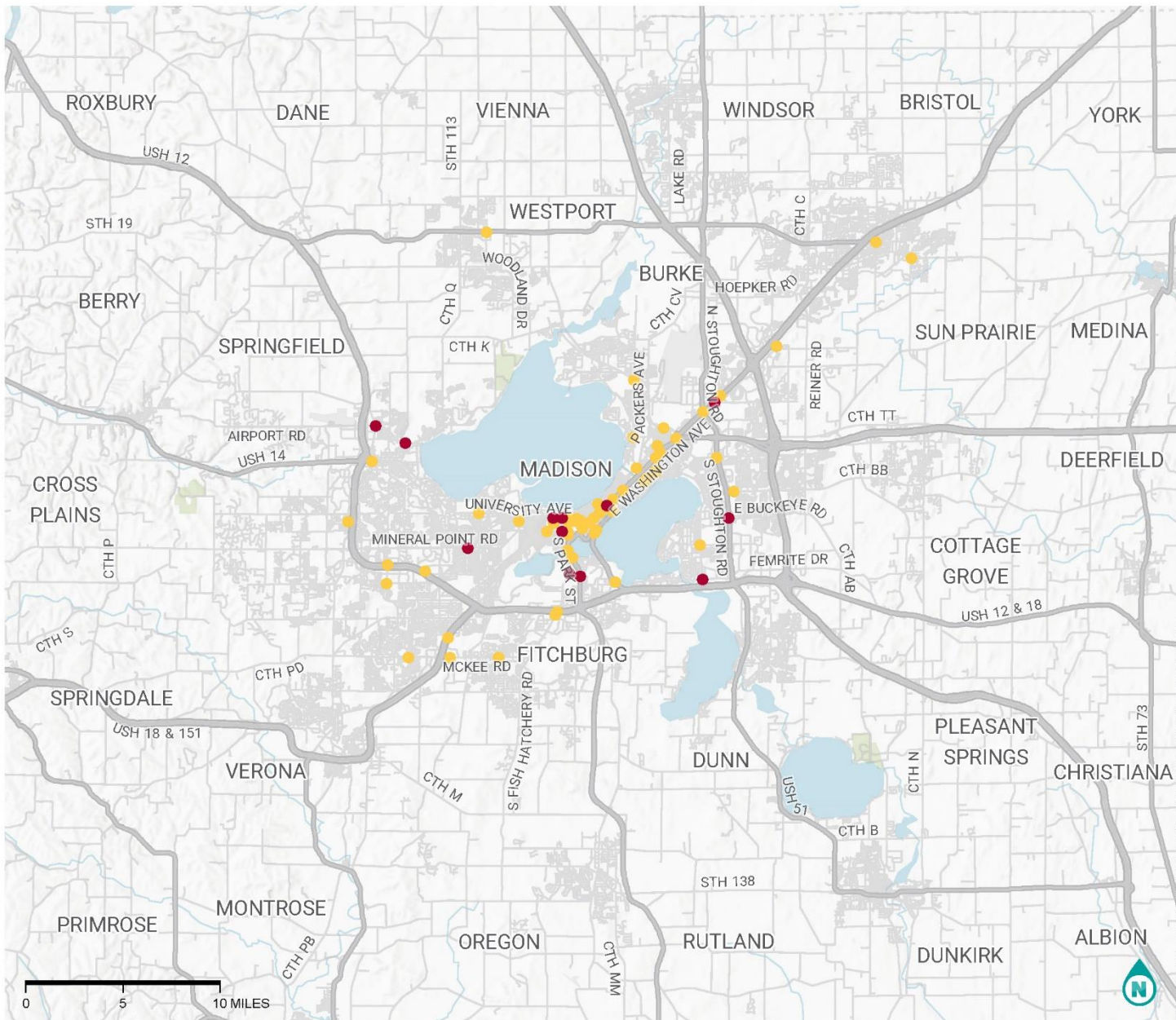
This profile analyzes crashes that resulted in a severe or fatal injury. These non-junction crashes occurred on undivided rural roads with posted speed limits of at least 35 mph. Injuries resulted from the vehicle leaving the roadway and striking another object or otherwise losing control.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
1,224	4%	293	5%	53	12%	9%





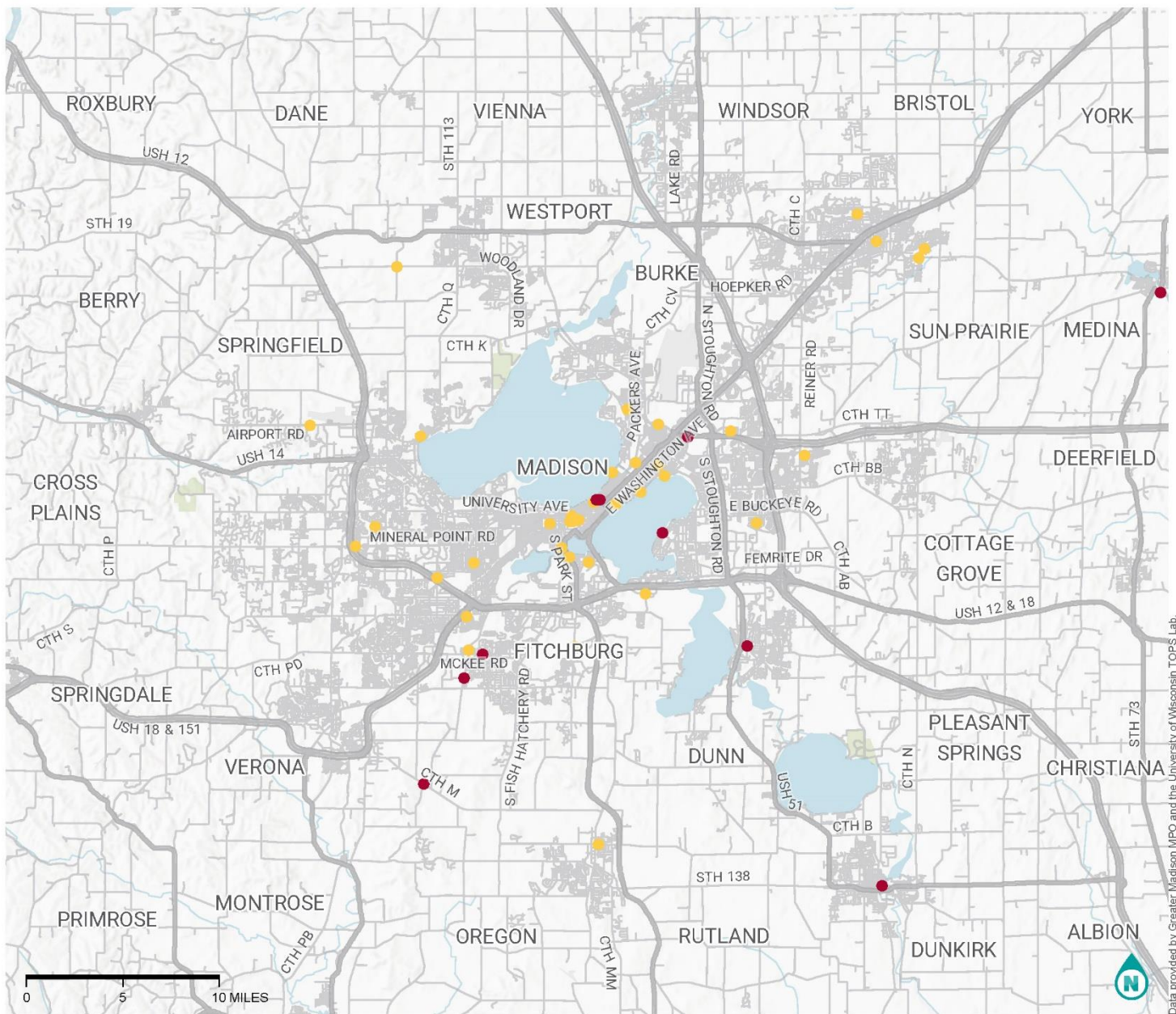
## SIGNALIZED INTERSECTION BICYCLE CRASHES

This profile analyzes severe or fatal bicycle crashes that occurred when a vehicle struck a bicyclist at a signalized intersection.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
102	22%	93	23%	13	27%	2%



## UNCONTROLLED INTERSECTION BICYCLE CRASHES

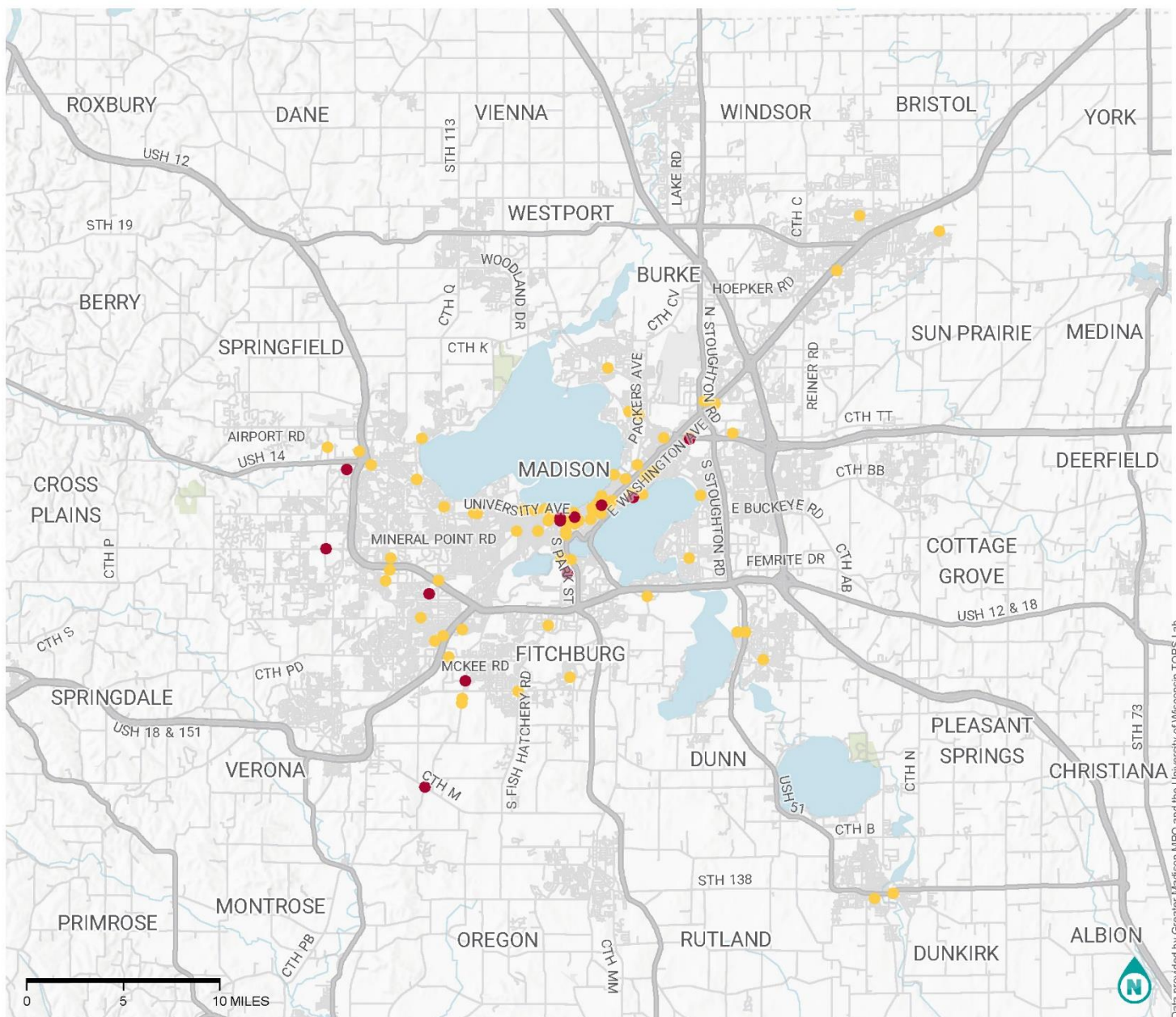
This profile analyzes severe or fatal bicycle crashes that occurred when a vehicle struck a bicyclist at an intersection with no traffic control devices.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
56	12%	51	12%	10	20%	2%





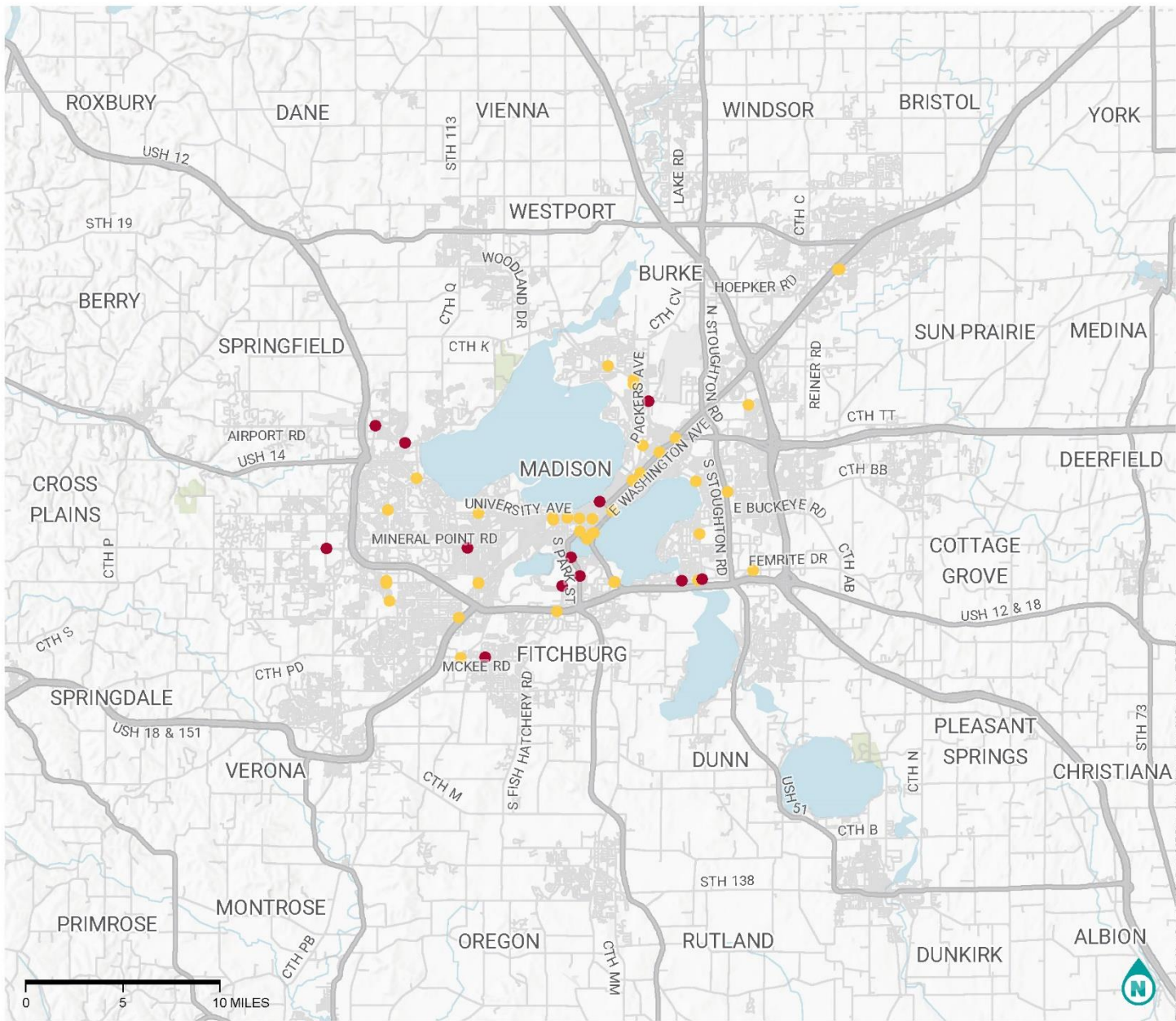
# BICYCLE CRASHES ON ROADS WITHOUT BIKE INFRASTRUCTURE

This profile analyzes bicycle crashes that occurred while the bicyclist was riding along an urban city street that had no bicycle infrastructure.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
100	22%	91	22%	12	25%	2%



## BICYCLE CRASHES ON MULTI-LANE ARTERIALS

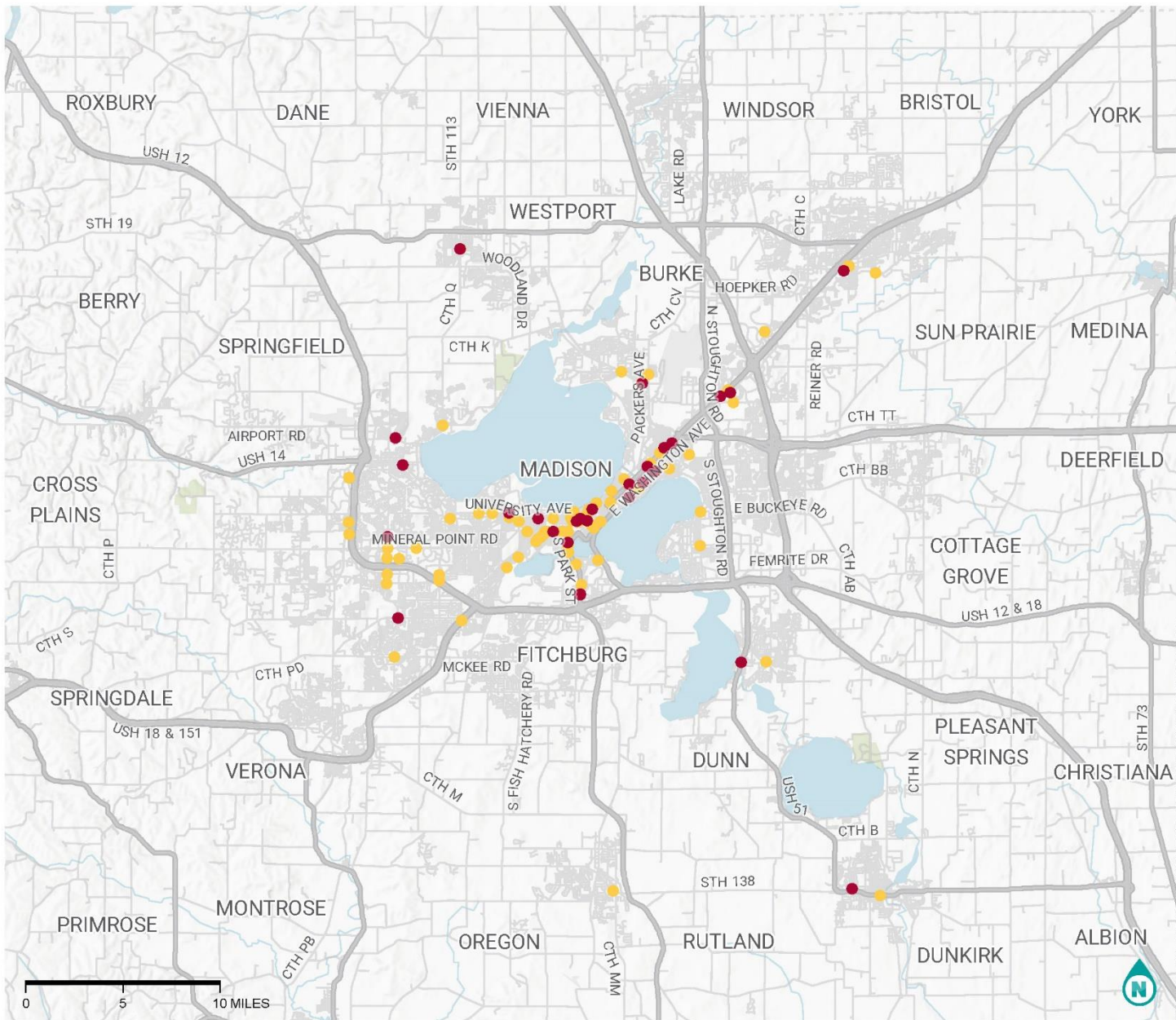
This profile analyzes severe or fatal bicycle crashes that occurred on multi-lane arterials with posted speed limits of at least 30 mph.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
70	15%	65	16%	12	24%	2%





Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab.

## PEDESTRIAN CRASHES IN COMMERCIAL AREAS

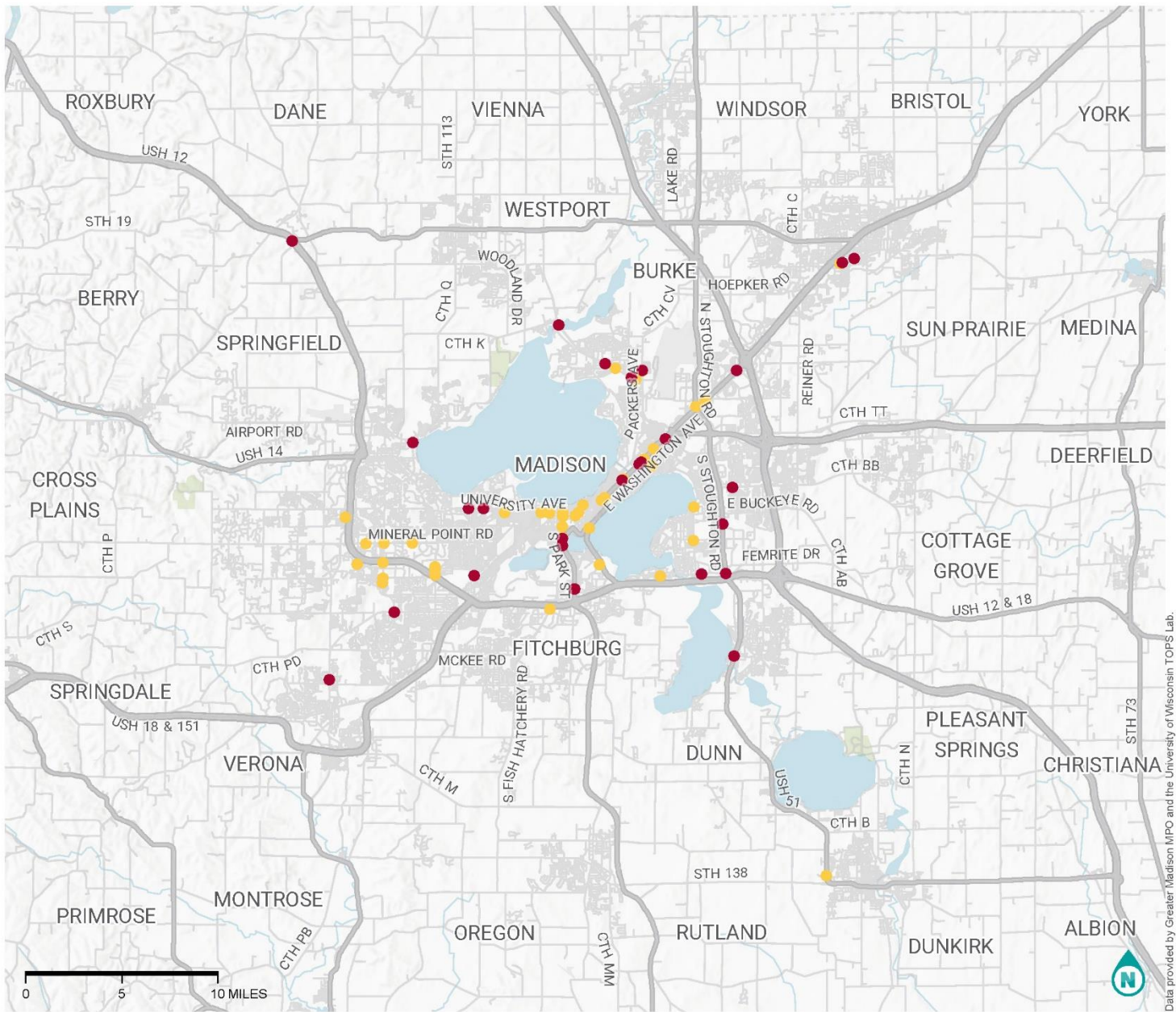
This profile analyzes pedestrian crashes that occurred while pedestrians were crossing the road in marked crosswalks in areas with commercial land uses.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
143	34%	136	35%	29	27%	5%





Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab.

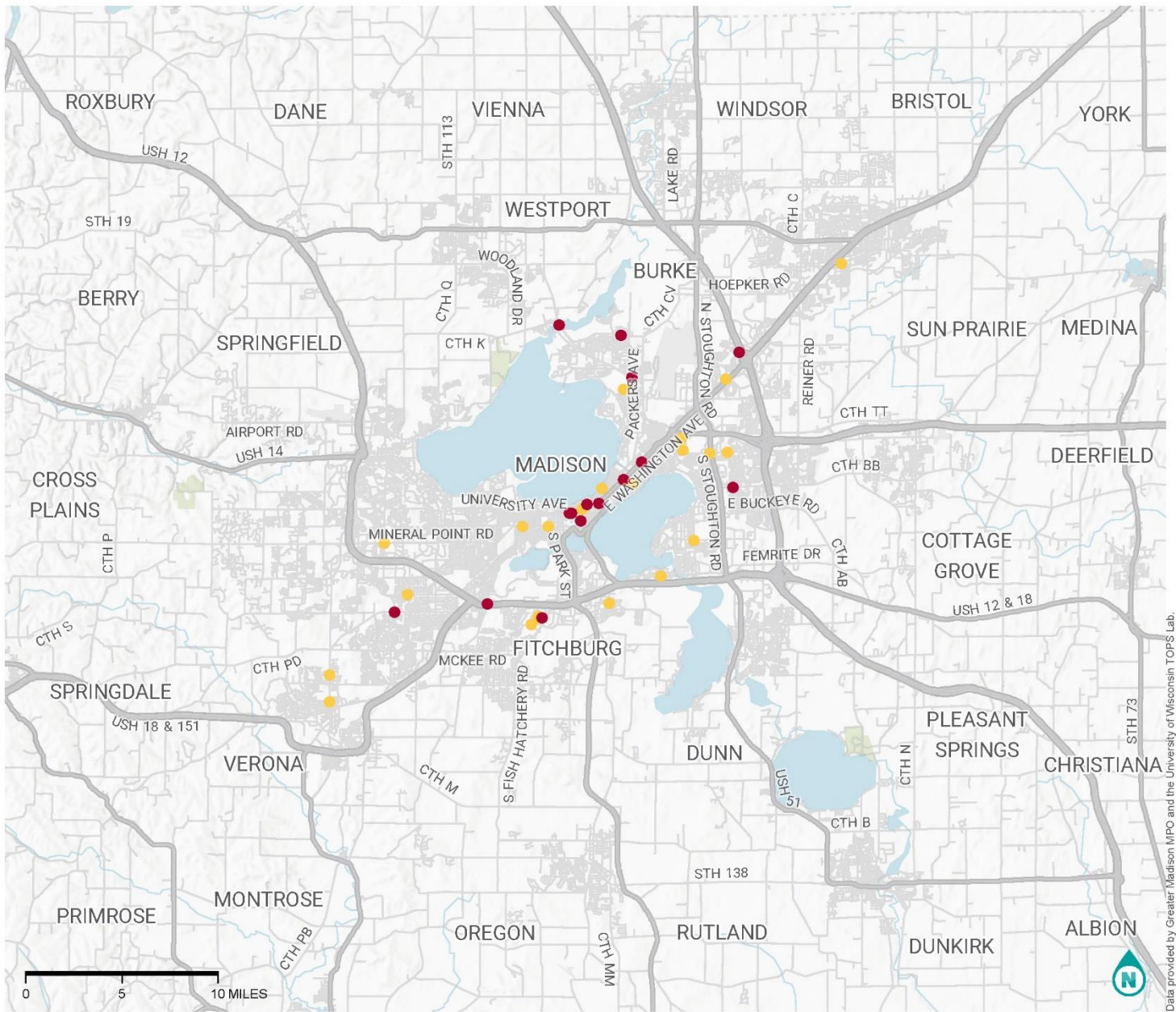
## PEDESTRIAN CRASHES ON MULTI-LANE ARTERIALS

This profile analyzes severe or fatal pedestrian crashes on multi-lane arterials with posted speed limits of 30 mph or greater and annual average daily traffic of at least 6,000 vehicles.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
88	21%	84	21%	31	29%	5%



Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab.

## PEDESTRIAN HIT & RUN CRASHES

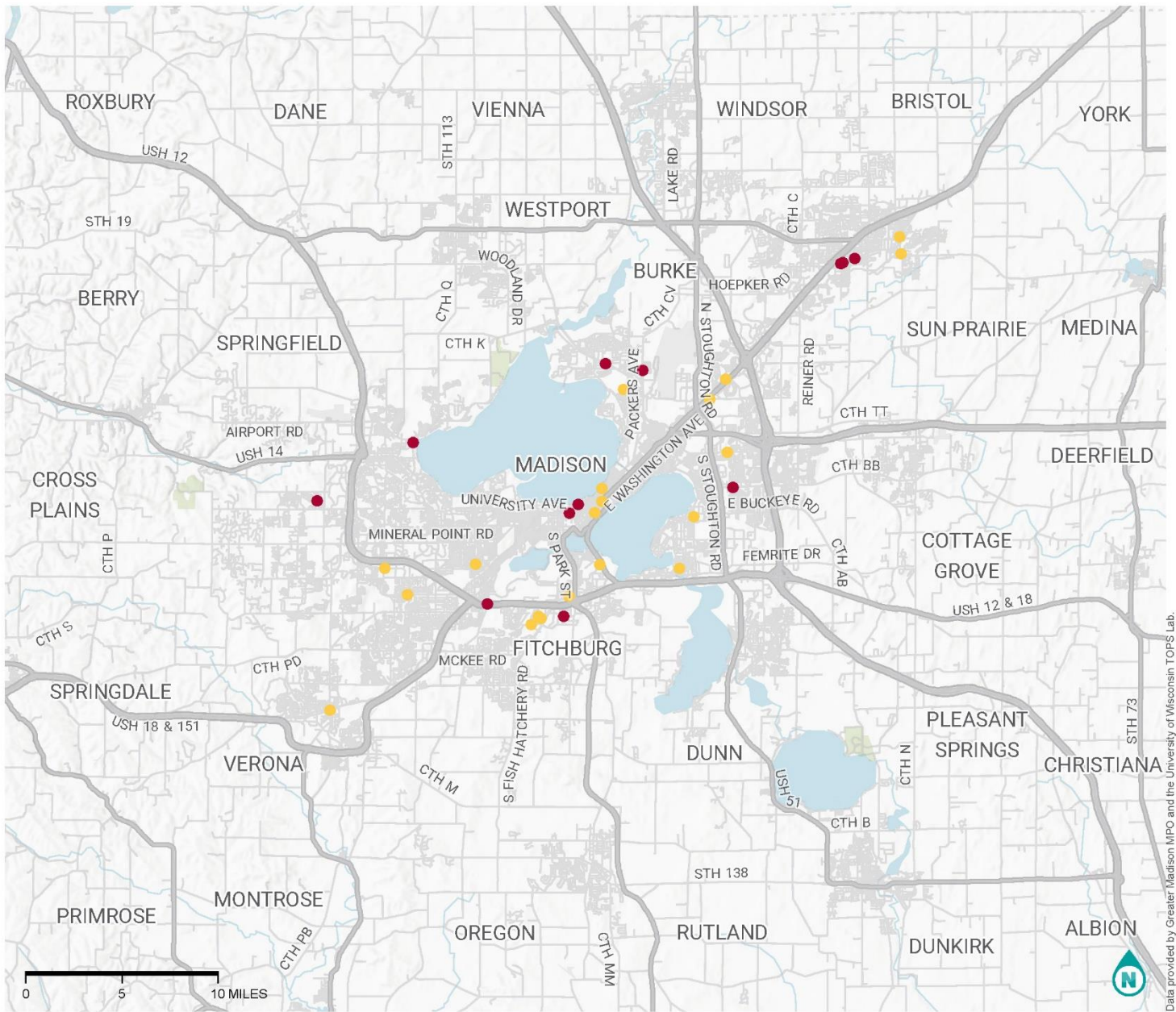
This profile analyzes severe or fatal hit and run pedestrian crashes that occur in urban settings at night.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
43	10%	41	10%	16	17%	3%





Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab.

## PEDESTRIAN CRASHES WHILE CROSSING MID-BLOCK

This profile analyzes severe or fatal pedestrian crashes in urban settings where the pedestrian is struck while crossing the road outside a marked crosswalk, not at an intersection.

## CRASH SEVERITY

- Severe or Fatal
- Lesser Injury

All Crashes		FI Crashes		KSI Crashes		% of All KSI Crashes
# of Crashes	% of Modal Crashes	# of FI Crashes	% of Modal FI Crashes	# of KSI Crashes	% of Modal KSI Crashes	
35	8%	66	17%	12	11%	2%

## Speeding Behavior

Increased vehicle speeds result in more severe injury outcomes.<sup>2</sup> **Figure 1** shows the difference between modeled free-flow vehicle speeds and the posted speed limit around the county. Free-flow speed is based on the 66<sup>th</sup> percentile speed during off-peak hours, per INRIX GPS trace data developed by Replica.<sup>3</sup> Additionally, the map highlights roads where the free-flow speed is 30 mph or greater.

Vehicle free-flow speeds exceed posted speed limits by more in rural areas than they do in urban areas. Most rural roads outside of Madison show free-flow speeds of at least 15 mph greater than the posted speed limit. In general, speeding is lowest in downtown Madison and near the University of Wisconsin-Madison campus and increases in the suburban areas. Notable urban roads with prevalent speeding in the modeled data are S Whitney Way, Mineral Point Rd, S Segoe Rd, John Nolen Dr, and Cottage Grove Rd.

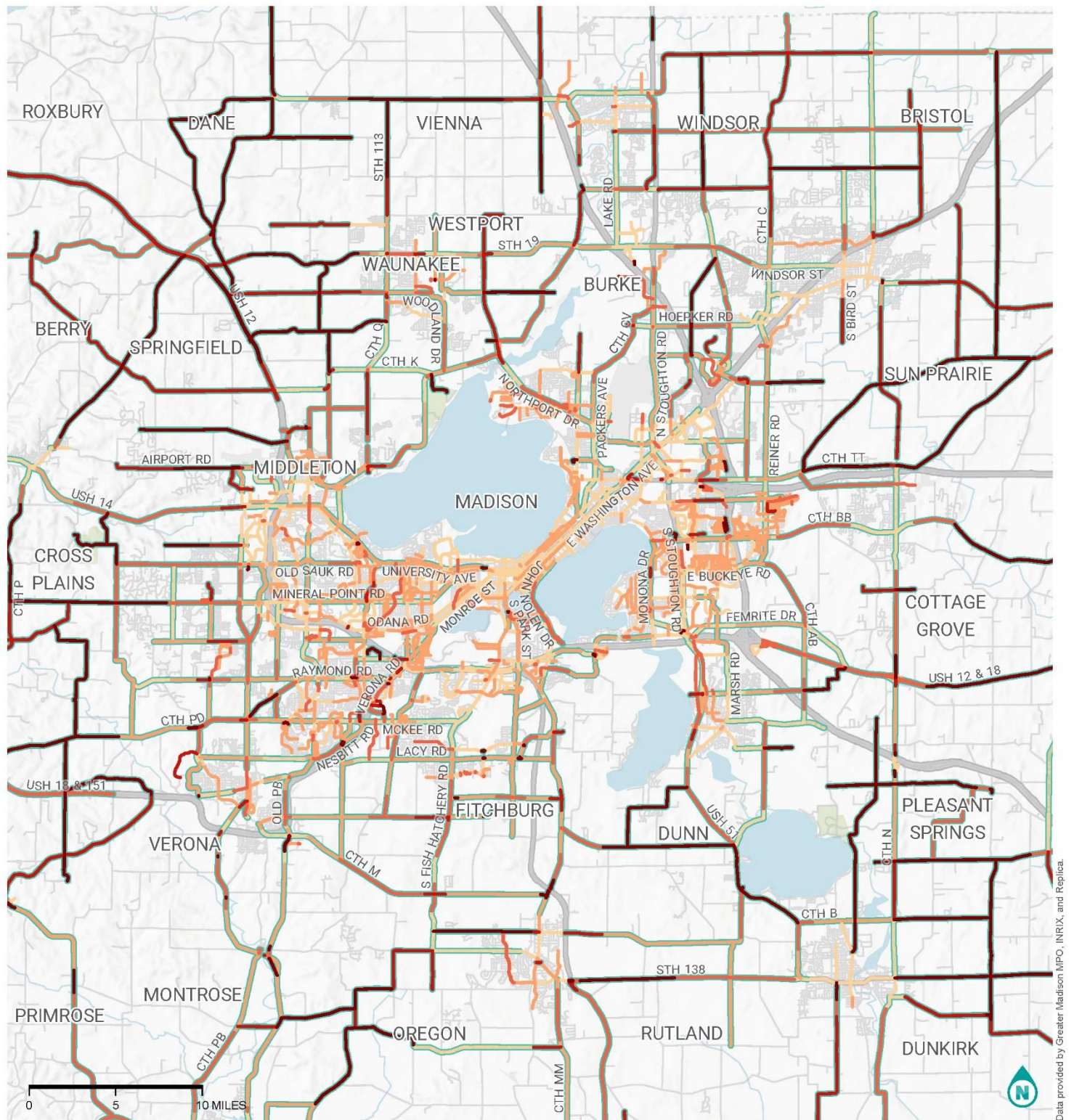
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<sup>2</sup> Read more about the link between vehicle speeds and injury severity here:  
[https://safety.fhwa.dot.gov/speedmgt/ref\\_mats/fhwas1304/Resources3/08%20-%20The%20Relation%20Between%20Speed%20and%20Crashes.pdf](https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwas1304/Resources3/08%20-%20The%20Relation%20Between%20Speed%20and%20Crashes.pdf)

<sup>3</sup> [Replica](#) develops annual average free-flow traffic speeds per roadway network link, based on speeds during off-peak hours. Data used for this analysis was from 2022.



Figure 1. Modeled Free-Flow Speed



Data provided by Greater Madison MPO, INRIX, and Replica.

## MODELED FREE-FLOW SPEED

Free-flow speed is defined as the 66th percentile speed during off-peak hours, based on INRIX GPS traces. Freeways have been removed.

### MADISON MPO SAFETY ACTION PLAN

## FREE-FLOW SPEEDING ABOVE POSTED SPEED LIMIT

- Greater than 15 mph
- 11 to 15 mph
- 6 to 10 mph
- 1 to 5 mph
- At or below
- No data
- Indicates free-flow speed of 30 mph or greater



# Appendix 4 - Crash Data Review and HIN Memo



To: Colleen Hoesly, Greater Madison MPO

From: Kim Voros, Erin Daly Davenport and Alia Awwad, Alta Planning + Design

Date: June 2023

Re: Task 2.1 Crash Data Review

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The Federal Highway Administration recommends that municipalities take a holistic view of Vision Zero plans to create a safe system that anticipates human mistakes and keeps impact energy on the human body at tolerable levels.<sup>1</sup> The Greater Madison MPO Regional Transportation Safety Action Plan (Safety Action Plan) relies on a thorough understanding of motor vehicle, bicycle, and pedestrian crash trends to inform strategic investments in safety improvements aimed at decreasing fatal and severe injuries on roadways throughout the region.

This technical memorandum documents the High-Injury Network (HIN) for the Greater Madison MPO region. A HIN consists of the roadway corridors on which many people have been killed or severely injured due to motor vehicle crashes. Adoption of a HIN is recommended as part of a Vision Zero strategy. This moves beyond typical crash history and allows for a better description of the types of roadways and intersections in the Madison MPO where users are the most at risk. This allows the MPO to proactively work to minimize the occurrence and severity of crashes into the future.

In addition to the development of a HIN, the Safety Action Plan will also rely on collision profiles, which considers crash types, land use context and road user behavior to identify the most prevalent and severe injury crashes in the area to inform implementation recommendations.<sup>2</sup> Collision profiles will be developed as part of Task 2.2. The potential use of StreetLight data as an input to future analysis is discussed at the end of this memorandum, though it was not determined feasible to use the data as part of this project.

## Madison MPO HIN Overview

The HIN was developed by the Traffic Operations and Safety Laboratory (TOPS Lab) at the University of Madison Wisconsin. The HIN is comprised of two separate analyses: the first considers segments while the second considers intersections. Both analyses use collisions occurring from the four-year period from 2017 through 2020. While a 5-year time period is frequently used in collision analyses, the Wisconsin crash reporting format changed at the beginning of 2017, therefore increasing the complexity of collision reporting with data organized in multiple formats. The analysis primarily considers arterial and collector roadways though some additional roadways and intersections were also evaluated (see Map 1).

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<sup>1</sup> Federal Highway Administration. Lessons Learned from Development of Vision Zero Action Plans. Accessed at [https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA-SA-20-073\\_Lessons\\_Learned\\_from\\_Development\\_of\\_Vision\\_Zero\\_Action\\_Plans.pdf](https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA-SA-20-073_Lessons_Learned_from_Development_of_Vision_Zero_Action_Plans.pdf)

<sup>2</sup> Wisconsin collision data uses a KABCO collision assessment scale. For more information on various collision ranking methods see: [https://safety.fhwa.dot.gov/hsip/spm/conversion\\_tbl/pdfs/kabco\\_ctable\\_by\\_state.pdf](https://safety.fhwa.dot.gov/hsip/spm/conversion_tbl/pdfs/kabco_ctable_by_state.pdf)

## Statistical Basis of HIN

In Wisconsin, collision severity is assessed using the KABCO scale utilizing the following definitions:<sup>3</sup>

- K – Fatal Injury
- A – Suspected Serious Injury
- B – Suspected Minor Injury
- C – Possible Injury
- O – No Apparent Injury

The HIN considers K, A, B and C collisions, that is those with a possibility of injury or greater.

The HIN was identified through the development of Safety Performance Functions (SPFs), which are then used to implement the Empirical Bayes method to calculate segment or intersection level scores. These ratings are then translated into a Level of Safety Service (LOSS) for intersections and segments.<sup>4</sup>

The LOSS method was used to sort segments and intersections into four categories. Scores of LOSS 1 and 2 have a low to moderate potential for crash reduction. Scores of LOSS 3 and 4, which are used to define the HIN, have a moderate to high potential for crash reduction. For additional detail on how the HIN was developed see Appendix A and Appendix B.

The Madison MPO's highly statistical basis to develop an HIN is rigorous and atypical. Many HINs are typically comprised of intersections and segments with a high number of observed severe collisions. However, the HIN methods attempt to identify long-term trends in collision patterns that account for regression to the mean.

## HIN Findings

The HIN is comprised of 1,688 segments and 1,146 intersections. See Map 2 through Map 4 for additional information on their location around the region.

### HIN Segments

Roadway segments in the HIN are predominately local roadways (35% by mileage) and county highways (31%). US Highways and highway ramps account for another 13% of segments, each. Accordingly, 64% of HIN segments have one lane of travel in each direction, while 27% have two lanes in each direction and 9% have three lanes.

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<sup>3</sup> Federal Highway Administration. (n.d.). KABCO Conversion Table by State. Retrieved from [https://safety.fhwa.dot.gov/hsip/spm/conversion\\_tbl/pdfs/kabco\\_table\\_by\\_state.pdf](https://safety.fhwa.dot.gov/hsip/spm/conversion_tbl/pdfs/kabco_table_by_state.pdf)

<sup>4</sup> The Federal Highway Administration defines SPFs as crash prediction models, mathematical equations that relate the number of crashes of different types at a given location to specific site characteristics such as traffic volumes, lane width and traffic controls.

The speed limit of HIN segments ranges from 15 to 55 mph, with 55 mph as the most common segment speed limit (24%) and followed by 25 mph (21%). The full distribution of speed limits is shown in Figure 1.

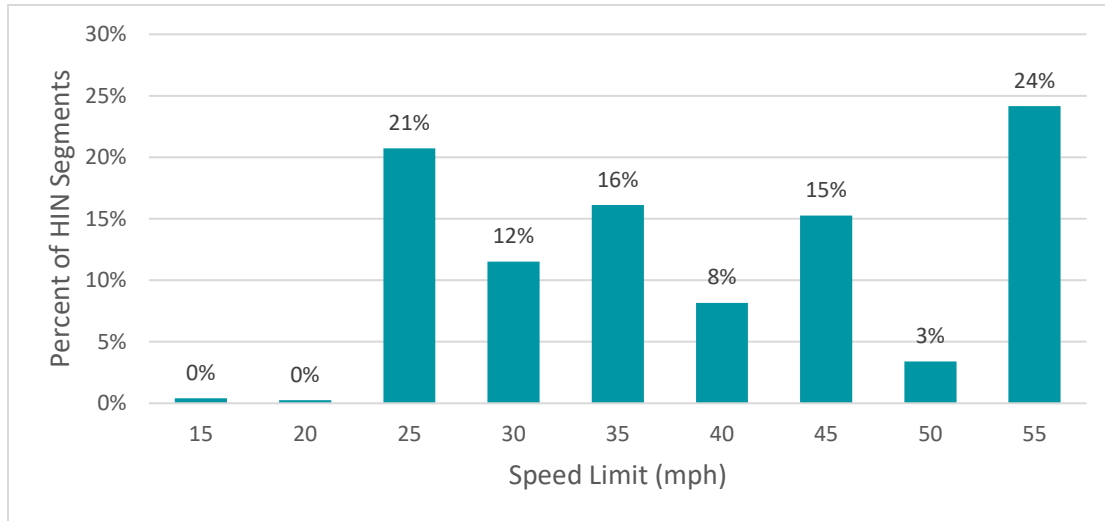


Figure 1. HIN Segment Speed Limit

The volume of roadway segments in the HIN ranges from less than 2,000 to over 25,000 AADT (or vehicles per day). Figure 2 shows that the distribution is heaviest on the lower volume end of the range, clustered from 1-12,000 AADT.

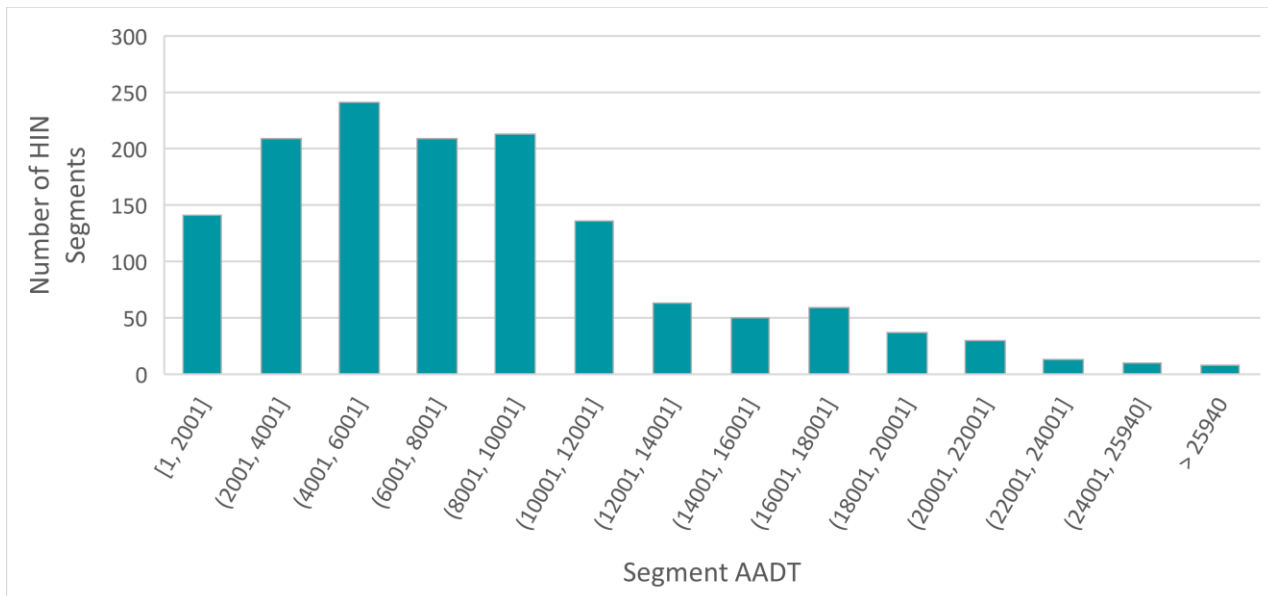


Figure 2. HIN Segment Traffic Volumes (AADT)

The HIN is spread throughout the Greater Madison MPO region, with a concentration in the City of Madison (40% of segments by mileage). The Cities of Fitchburg and Middleton, and the Towns of Burke, Sun Prairie, and Pleasant Springs all have 10 or more miles of HIN in their jurisdictions. Mileage for these communities is shown in Table 1, with their distribution shown in Map 3. All additional MPO Jurisdictions encompass three percent or less of the HIN, each.

Table 1. HIN Segment Distribution Across MPO Jurisdictions

Municipality	Percent of MPO HIN Miles	Miles
City of Madison	40%	116.43
City of Fitchburg	9%	24.95
City of Middleton	5%	13.24
Town of Burke	4%	13.07
Town of Sun Prairie	4%	11.44
Town of Pleasant Springs	4%	10.75

## HIN Intersections

There are 1,114 total intersections in the HIN analysis, shown in Map 2. Of these, the vast majority are stop-controlled from one direction (71%), with 18% signal-controlled. An additional four percent are all-way stop-controlled or have no control, respectively.

The maximum speed limit at HIN intersections ranges from 20 to 55 mph. The most frequent speed limit of HIN intersections is 25 mph (36%), which is consistent with the high number of intersections in the City of Madison.

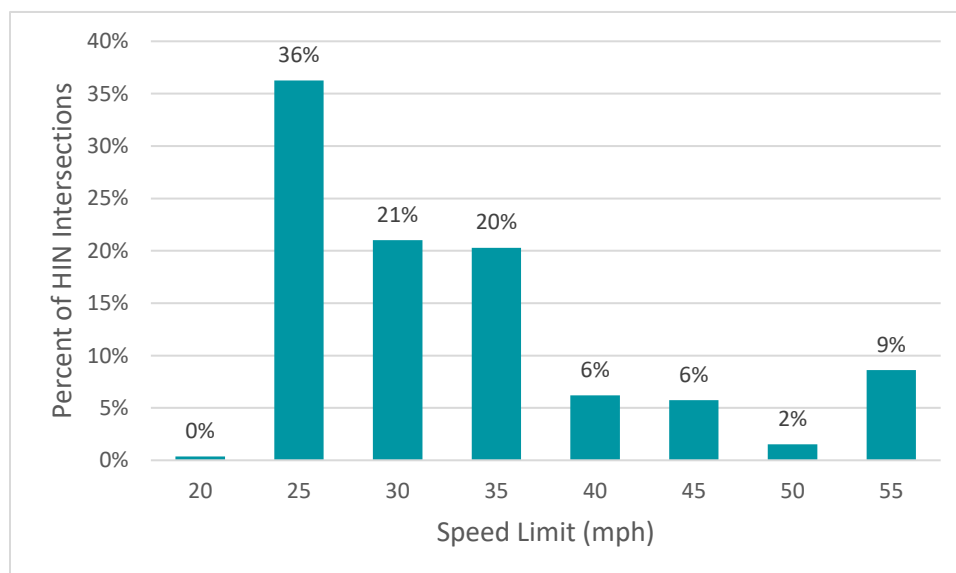


Figure 3. HIN Intersection Speed Limit



The traffic volume of intersections in the HIN (representing the highest volume leg of the intersection) ranges from less than 2,000 to over 38,000 AADT. Figure 4 shows that the distribution is heaviest on the lower volume end of the range, especially from 2,000-10,000 AADT.

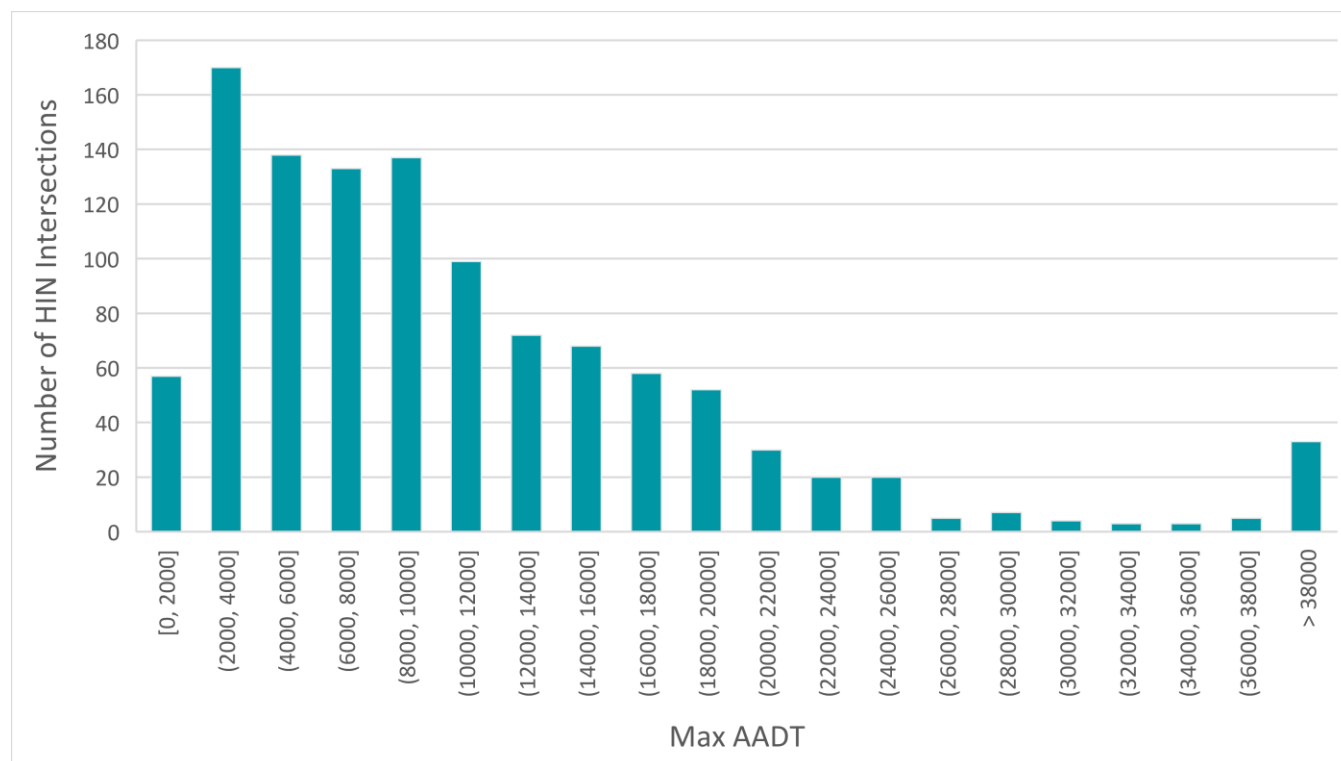


Figure 4. Intersection Traffic Volumes (AADT)

Like segments, the HIN intersections are spread throughout the region, but have a heavy concentration in the City of Madison (57%). Intersection distribution for the remaining jurisdictions with two percent or more of the HIN intersections is shown in

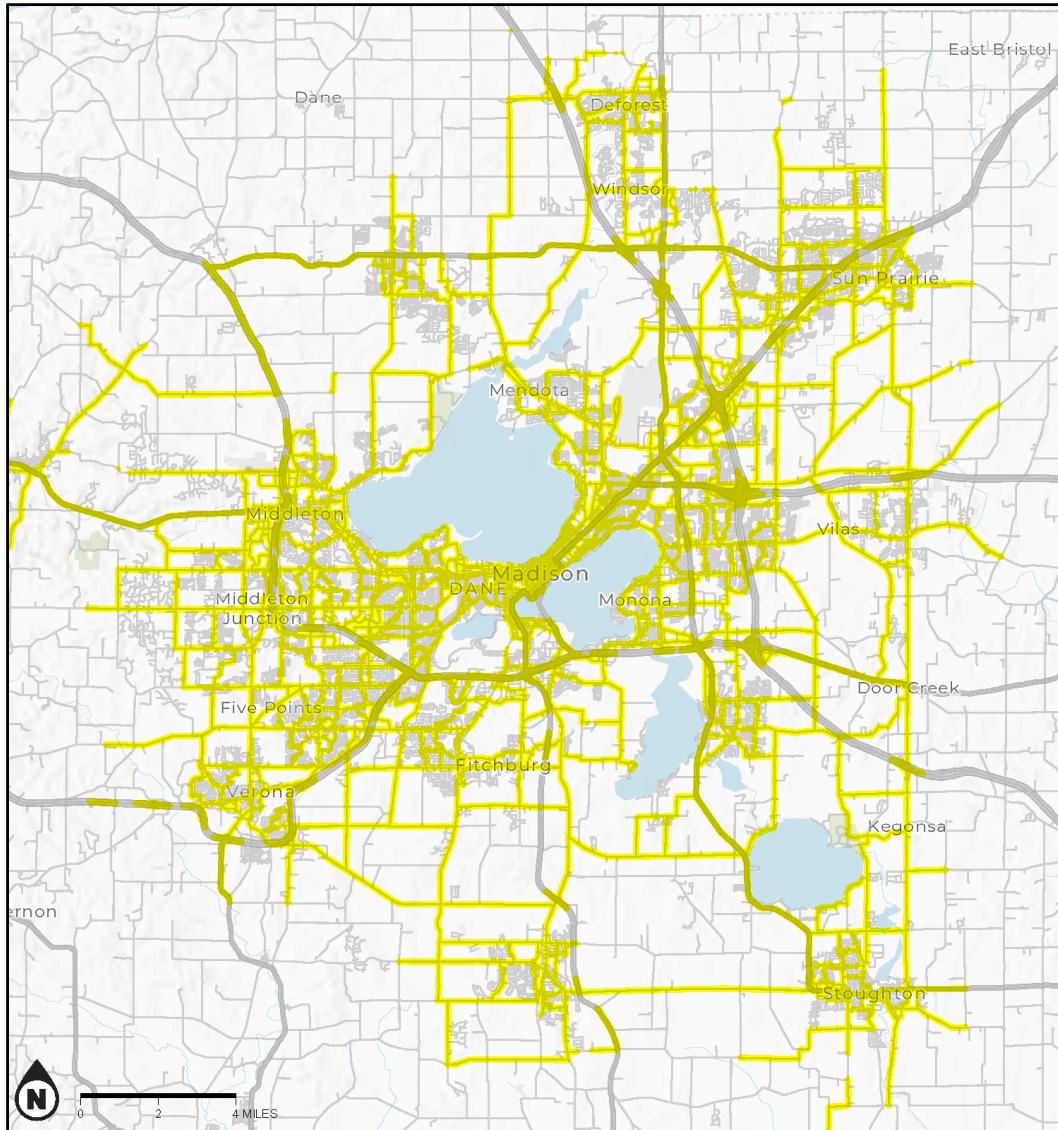


Table 2. All additional MPO Jurisdictions encompass one percent or less of the HIN intersections, each.

Table 2. HIN Intersection Distribution Across Jurisdictions

Municipality	Percent of MPO HIN Intersections	Number of Intersections
City of Madison	57%	654
City of Fitchburg	6%	70
City of Sun Prairie	6%	68
City of Middleton	5%	63
City of Stoughton	3%	33
City of Verona	2%	22
Village of Waunakee	2%	21
Village of DeForest	2%	19

Map 1. Evaluated Intersections and Roadways

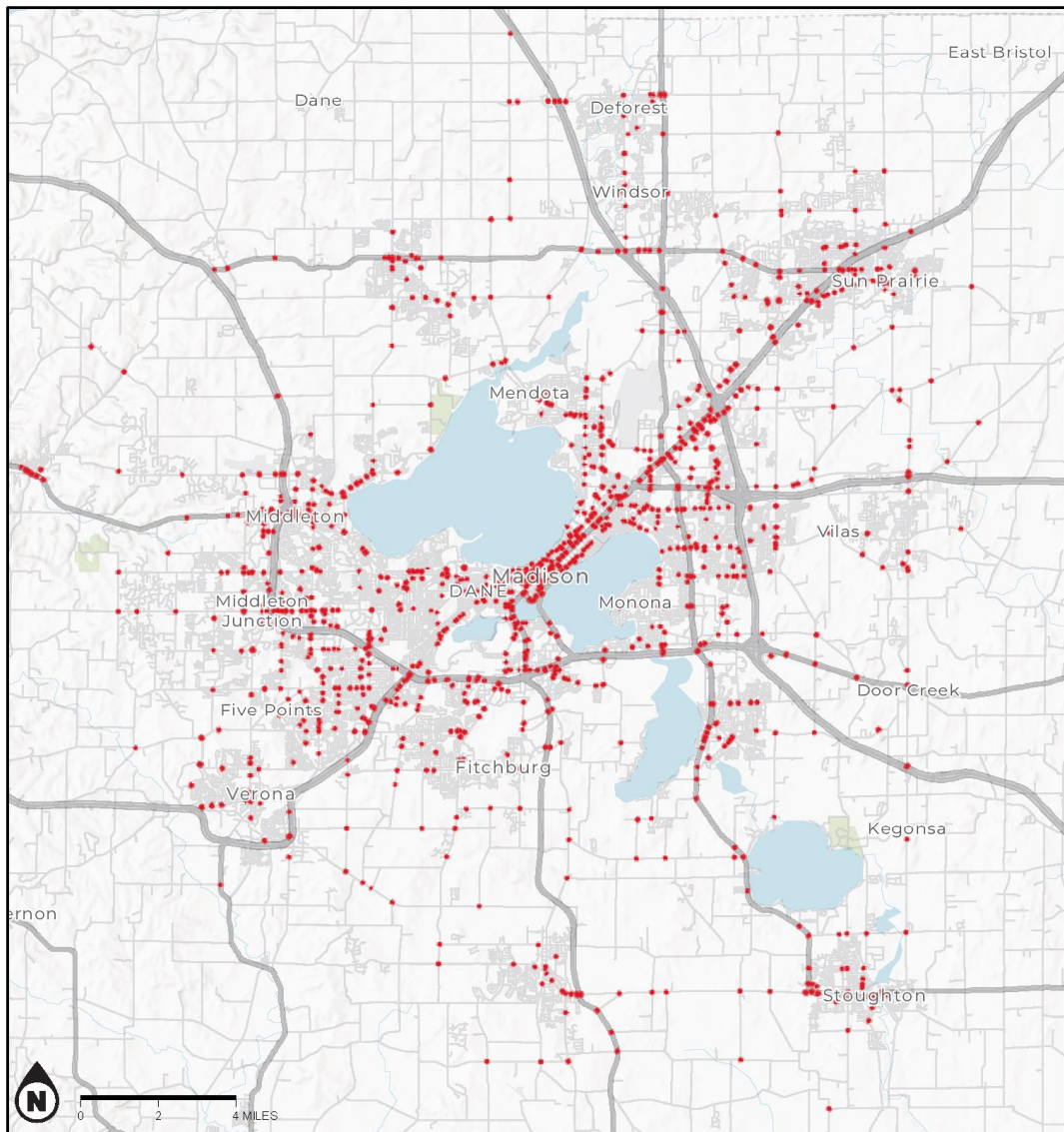


MADISON MPO HIN (2017 - 2020)  
INTERSECTIONS AND SEGMENTS ANALYZED  
FOR POTENTIAL INCLUSION IN HIN

MADISON MPO  
SAFETY ACTION PLAN

SAFETY ASSESSMENT  
Intersection or Segment  
Analyzed for Potential  
Inclusion in HIN

Map 2. HIN Intersections



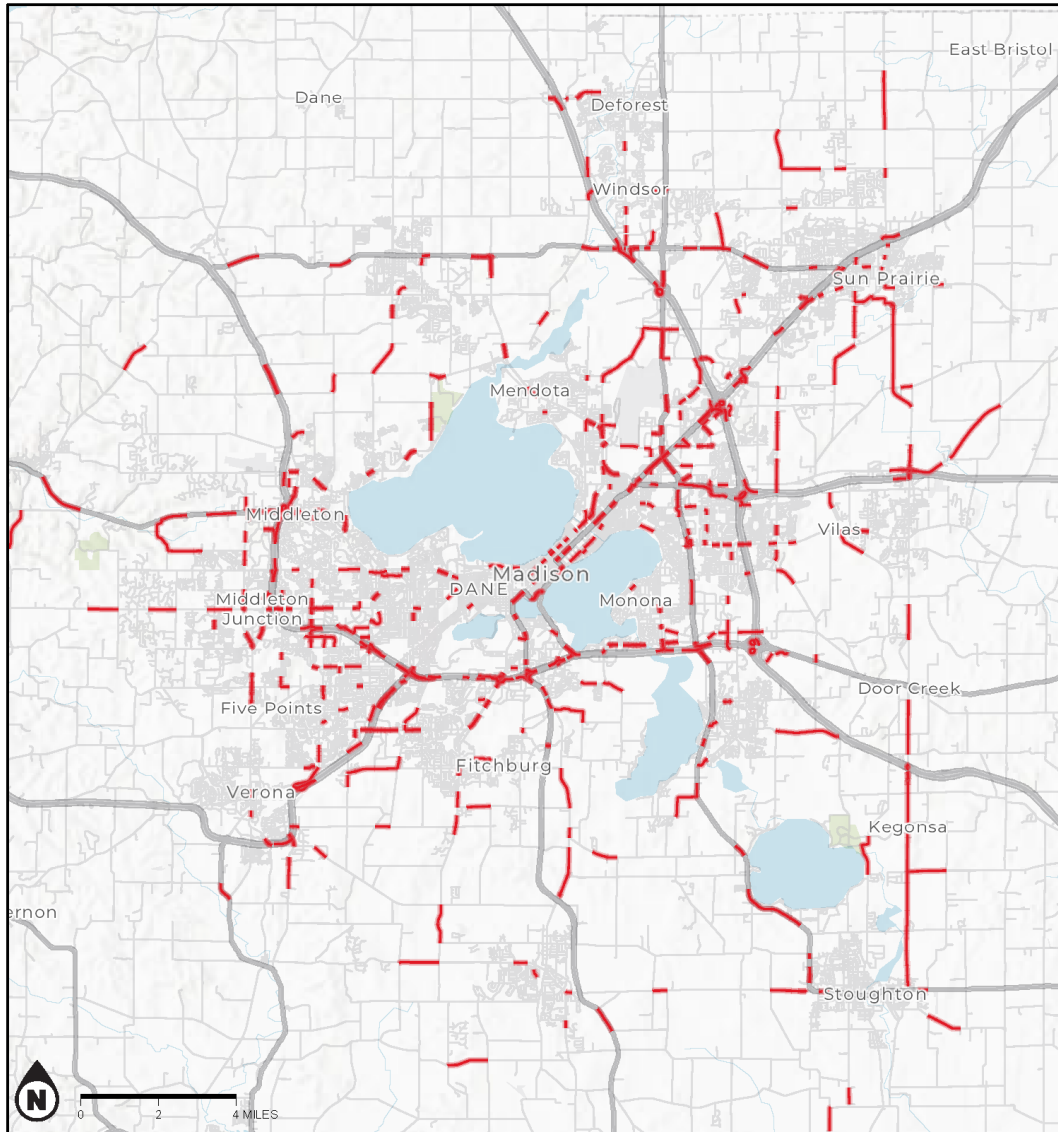
# MADISON MPO HIN (2017 - 2020) INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK  
— HIN Intersection



Map 3. HIN Segments

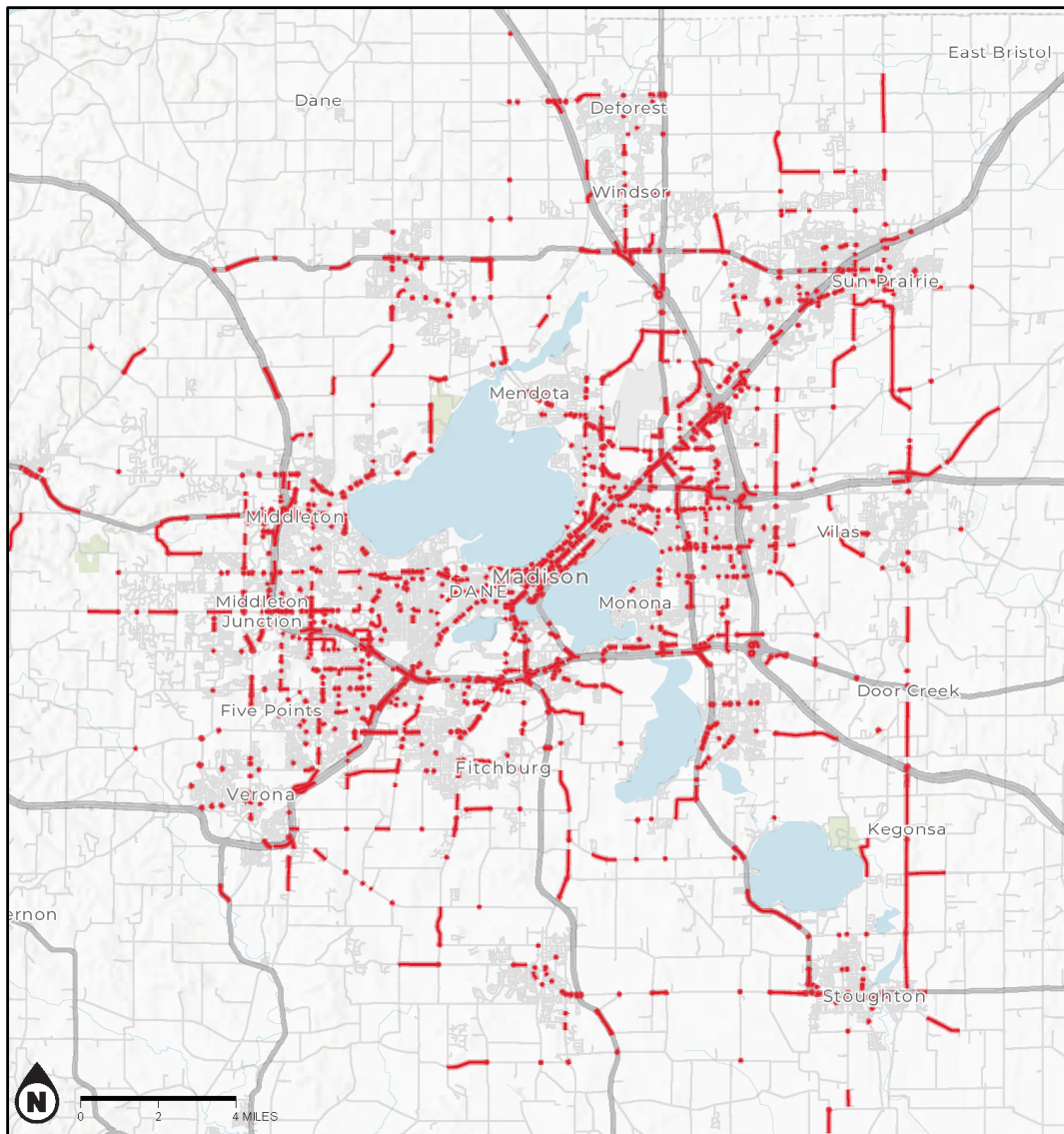


MADISON MPO HIN (2017 - 2020)  
SEGMENTS

MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK  
— HIN Roadway Segment

Map 4. HIN Intersections and Segments



# MADISON MPO HIN (2017 - 2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK  
— HIN Roadway or  
Intersection Segment

## HIN Use Considerations

As mentioned earlier, the Madison MPO HIN is unique among other HINs developed by different city, MPO, and state agencies due to the methods and data structure used. The following list outlines these differences and includes relevant considerations for usage.

- Comprised of two unique datasets.** The HIN is comprised of two data sets, one that represents segments and one that represents intersections. While both are composed of segment-based geometry and represent the same 4-year time period, each has a unique set of data attributes and was created at a different time. While each dataset is very robust, this data structure may complicate analysis that considers both intersections and segments simultaneously. For example, there are often wide geographic differences between clusters of identified HIN intersections and segments.
- Consideration of Expected, Not just Observed Collisions.** The HIN is based on a LOSS score which describes the expected crash risk which is derived through SPF factors which considers both observed and predicated collisions. Typically, HINs are calculated solely on observed collisions and naturally reactive. Consideration of expected collisions within a HIN deviates from the current industry standard, which constructs an HIN based solely on observed collisions. This makes the HIN a dataset that is both proactive and reactive and care should be taken when using the data. For example, if a grant application will provide funding for locations with a known safety risk (observed collisions), the HIN should be used in conjunction with collision data to confirm that the appropriate types of collisions were present at the segment or intersection in question. This is because it is common for grant applications to ask for an actual collision history as part of the grant application. Since the HIN is constructed using both observed and predicted collisions either the collision data itself or the underlying HIN network data should be consulted to confirm that observed collisions occurred at the location in question.
- Not all locations with fatalities are represented in the HIN.** For the reasons mentioned previously, not all in locations with fatality collisions were represented. This may be due to data aggregation of attributes in the underlying network segmentation or because the of a lower LOSS score calculate for a given segment or intersection. Intersections and segments with an observed fatality, located within 500 feet of the designated HIN with a LOSS score of II and therefore not included in the HIN are shown on Map 4. Madison MPO may choose to review these locations and consider whether these types of locations should be considered in future iterations of the HIN.
- Observed Locations with bicycle and pedestrian injury collisions.** Map 5 shows the locations of observed bicycle and pedestrian fatality or injury collisions in blue. The HIN is shown in red as well as segments and intersections with a bike or pedestrian EPDO ranking in the top 20% of bicycle and pedestrian are shown in yellow.<sup>5</sup> There is substantial overlap between all three types of locations, though the overlap is inconsistent across the MPO. While areas of blue show locations with observed collisions that might be included in an HIN developed solely based on observed collision locations shown in yellow are highlighted through predictive analysis and would not be identified as potential HIN locations if observed locations only were used as inputs. These findings will be assessed further in development of collision profiles (Task 2.2.)

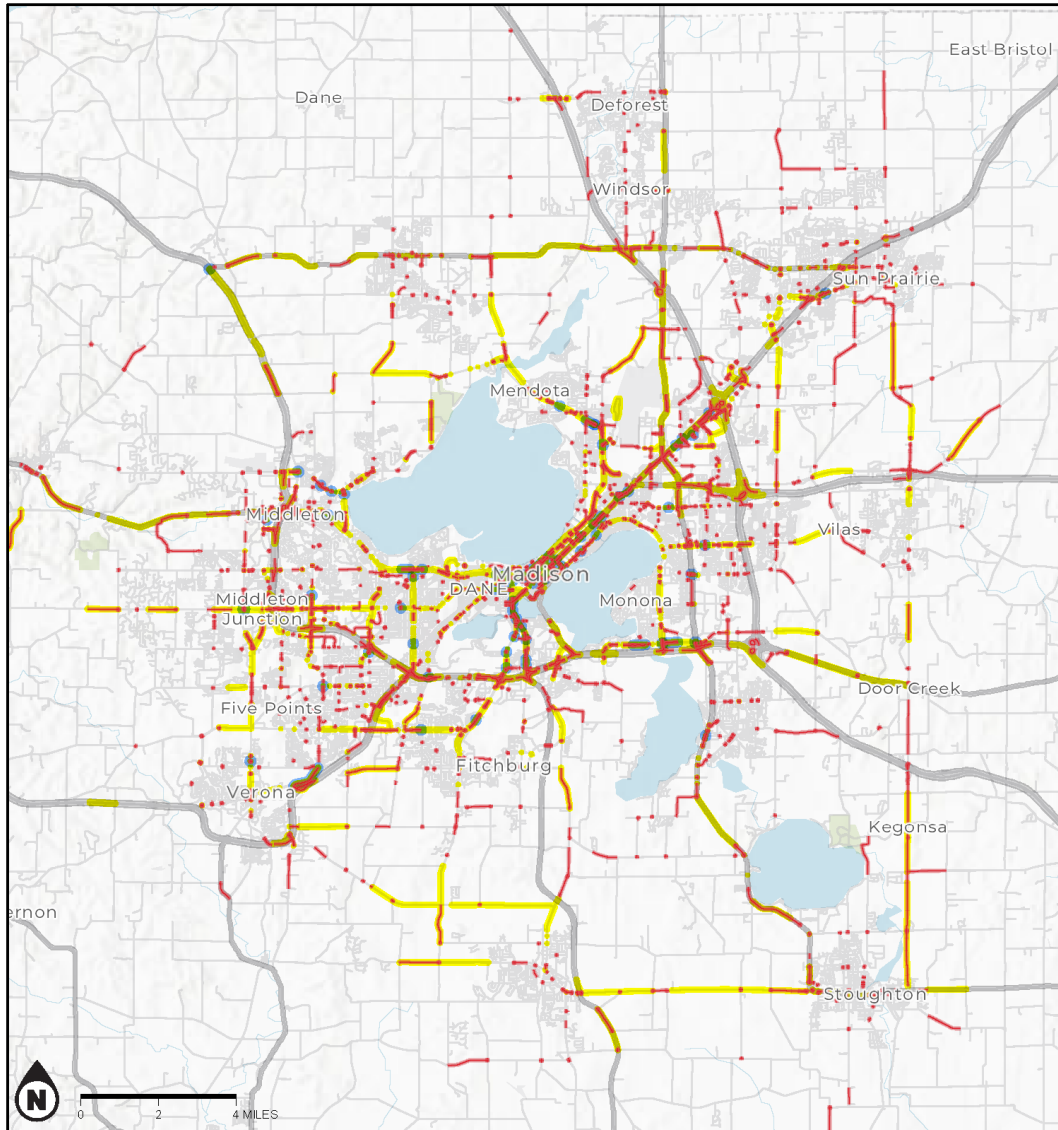
**Use of proxy data to identify bicycle and pedestrian exposure.** Proxy datasets (e.g., bicycle activity estimates from StreetLight and presence of commercial areas) were used to help develop assessment of bicycle and pedestrian risk. These data sets represent best industry practice, but care should still be taken when to validate modeled data findings when assessing individual corridors in more detail.

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<sup>5</sup> Additional information on EPDO crash valuation is found here.

[https://safety.fhwa.dot.gov/hsip/resources/fhwasa09029/sec2.cfm#:~:text=Equivalent%20Property%20Damage%20Only%20\(EPDO,property%20damage%20only%20crash%20cost.](https://safety.fhwa.dot.gov/hsip/resources/fhwasa09029/sec2.cfm#:~:text=Equivalent%20Property%20Damage%20Only%20(EPDO,property%20damage%20only%20crash%20cost.)

Map 5. KA Bike Ped Collisions in Proximity to HIN



**MADISON MPO HIN (2017 - 2020)**  
**BIKE PED FATALITY AND INJURY COLLISIONS AT**  
**ANALYZED LOCATIONS IN RELATION TO HIN**

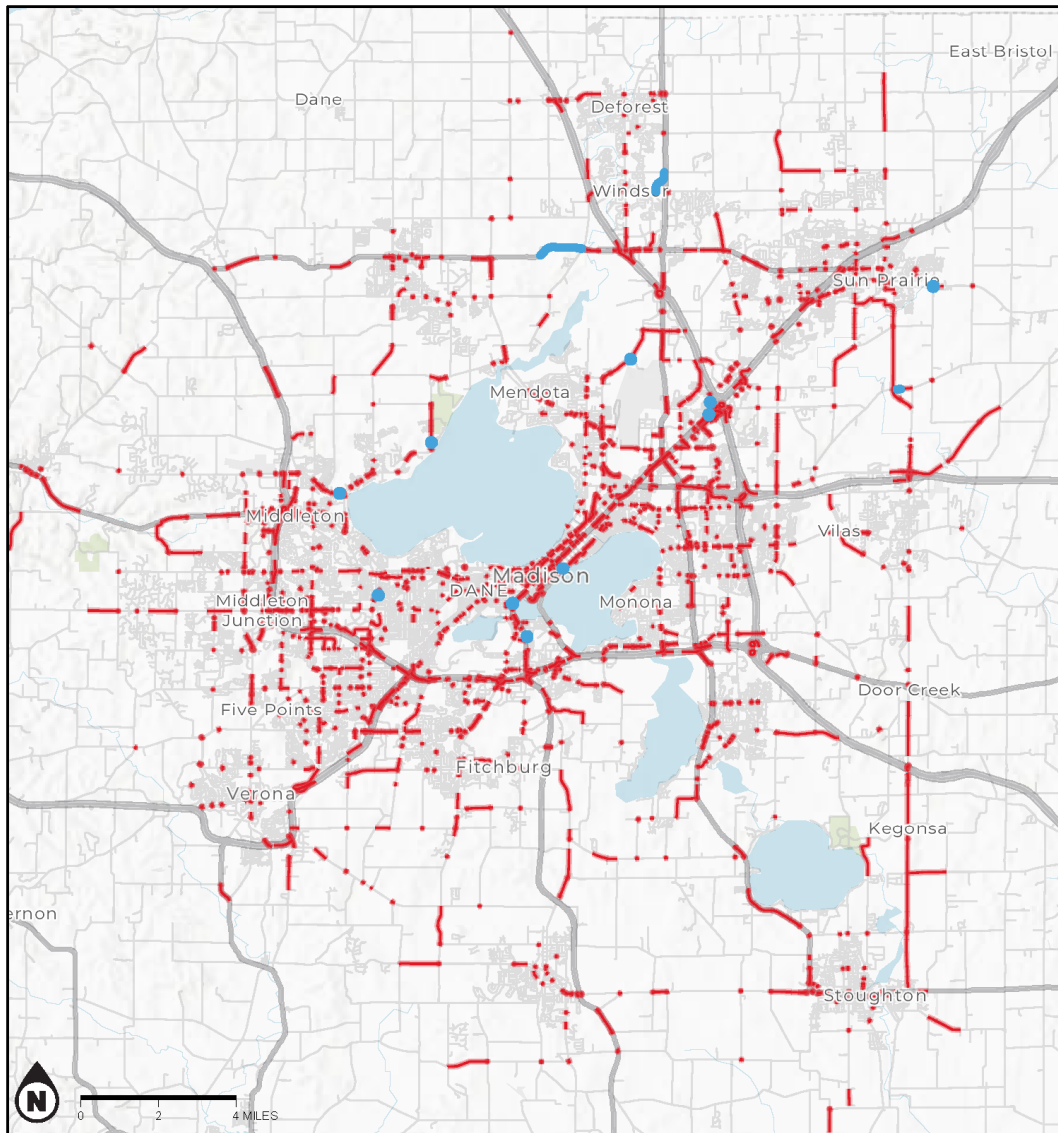
MADISON MPO  
 SAFETY ACTION PLAN

**SAFETY ASSESSMENT**

- HIN Roadway or Intersection Segment
- Intersection or Segment with Bike/Ped EPDO Ranking in Top 20%
- Intersection or Segment with Bike/Ped KA Collision



Map 6. FI Collisions in Proximity to HIN



MADISON MPO HIN (2017 - 2020)  
FSI LOCATIONS IN PROXIMITY TO HIN

MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK  
 FSI Location in Proximity to HIN  
 HIN Roadway or Intersection Segment



## StreetLight Data Use in Future Collision Analysis

StreetLight is a big data provider that measures and calculates trip information to better understand travel patterns. StreetLight data provides insights into traffic volumes, trip origins and destinations, and speed of travel along roadway segments. Trip information is derived from either connected vehicle data (CVD) or location-based services (LBS) data, which vary slightly in quality in different contexts.

The Madison MPO has access to the StreetLight platform for potential additional analyses, pending time and budget. One potential use of this data is to understand locations with excessive speeding and how they relate to equity and other focus areas throughout the region, such as the HIN. Speeding data can be overlaid with socioeconomic data such as race and income, or specifically the regional Environmental Justice Tier 1 and Tier 2 areas. This analysis can help planners understand where communities that face other socioeconomic burdens are also experiencing burdens associated with traffic safety.

An analysis like this is possible with the available data, however it is not feasible with the timeline and budget associated with this Safety Action Plan. Specific challenges include:

- The relatively short time period that CVD is available for. This dataset is the most accurate offering that StreetLight currently provides, due to the frequency of location pings and more precise trip stops and starts than LBS. However, CVD is currently only available for one year (2022). Due to slight differences in accuracy, the two datasets should not be combined to analyze longer-term trends.
- The number of segments that can be analyzed through the StreetLight web interface is far lower than the miles of arterial and collector roadways in the MPO (approximately 2,000, with 200 in the HIN). While there is command line level access available to help improve the processing speed of the analysis, the Madison MPO does not have the technical capacity to utilize that function.
- The StreetLight data follows Open Street Map block level segmentation, providing information in one-block segments through their easily accessible Zone Library. Best practice for analyzing average travel speeds recommends using .25 to .5 mile long segments. This requires additional data processing to set up the analysis.

Based on these considerations, additional future analysis is recommended as a part of Safe Streets for All grant implementation, including:

- Utilizing corridor level analysis where robust data is available. Additional years of CVD speed information will provide more detailed insights into travel patterns on priority corridors.
- Supporting detailed analysis of traffic patterns overlaid with socioeconomic factors (including environmental justice areas and the HIN).
- While speeding data will be utilized in this Safety Action Plan for collision profile analysis, the underlying data will be drawn from a field flagged in crash data from the TOPS Lab. Based on their methodology to derive this information from crash reports (which rely on police officer judgment), the influence of speed may be underreported throughout the region. Future analysis with Streetlight data could provide a more thorough understanding of where speed influences traffic safety in the region.

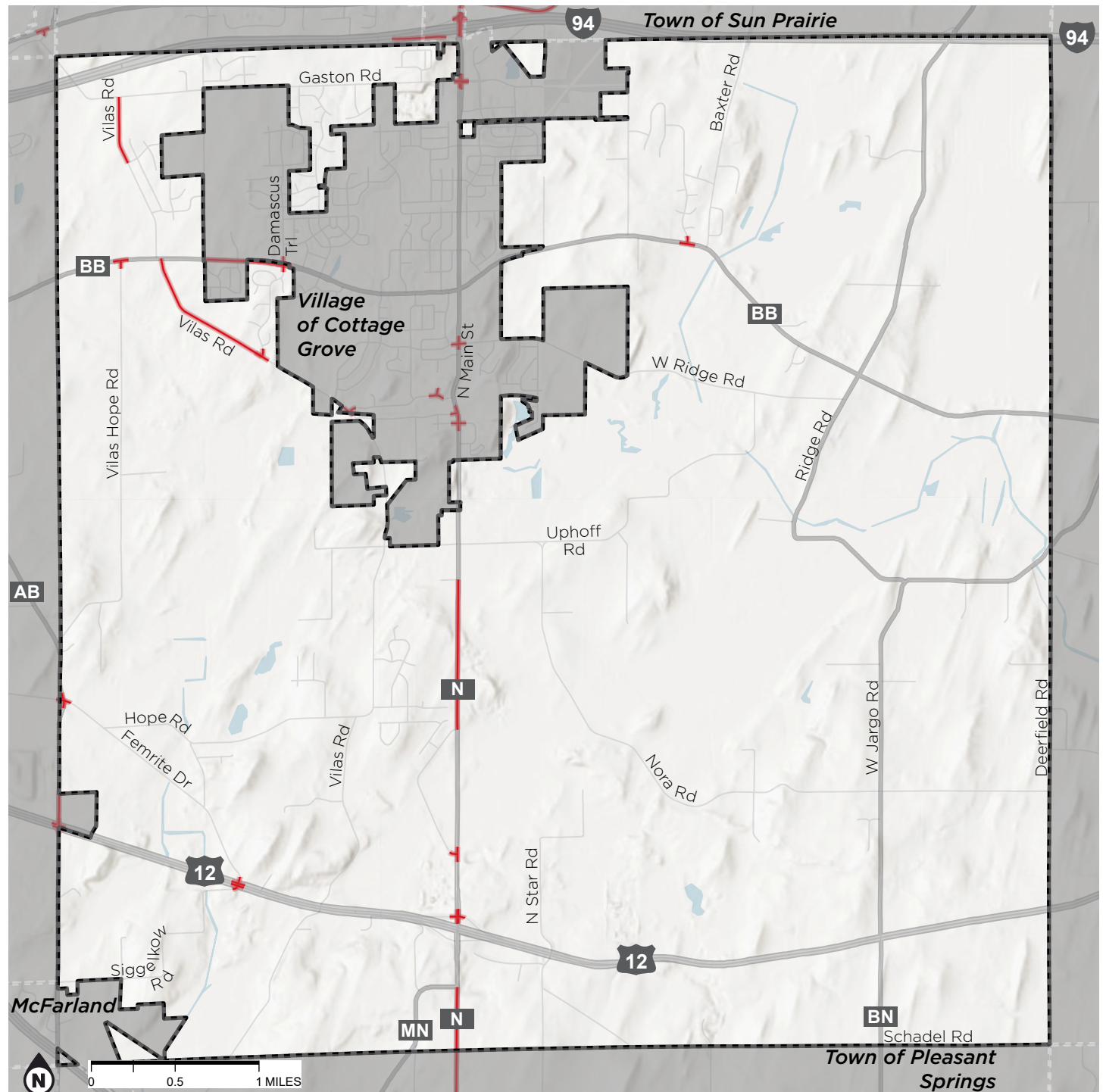
# Appendix 5 - HIN by Municipality

# TOWN OF COTTAGE GROVE HIN (2017-2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

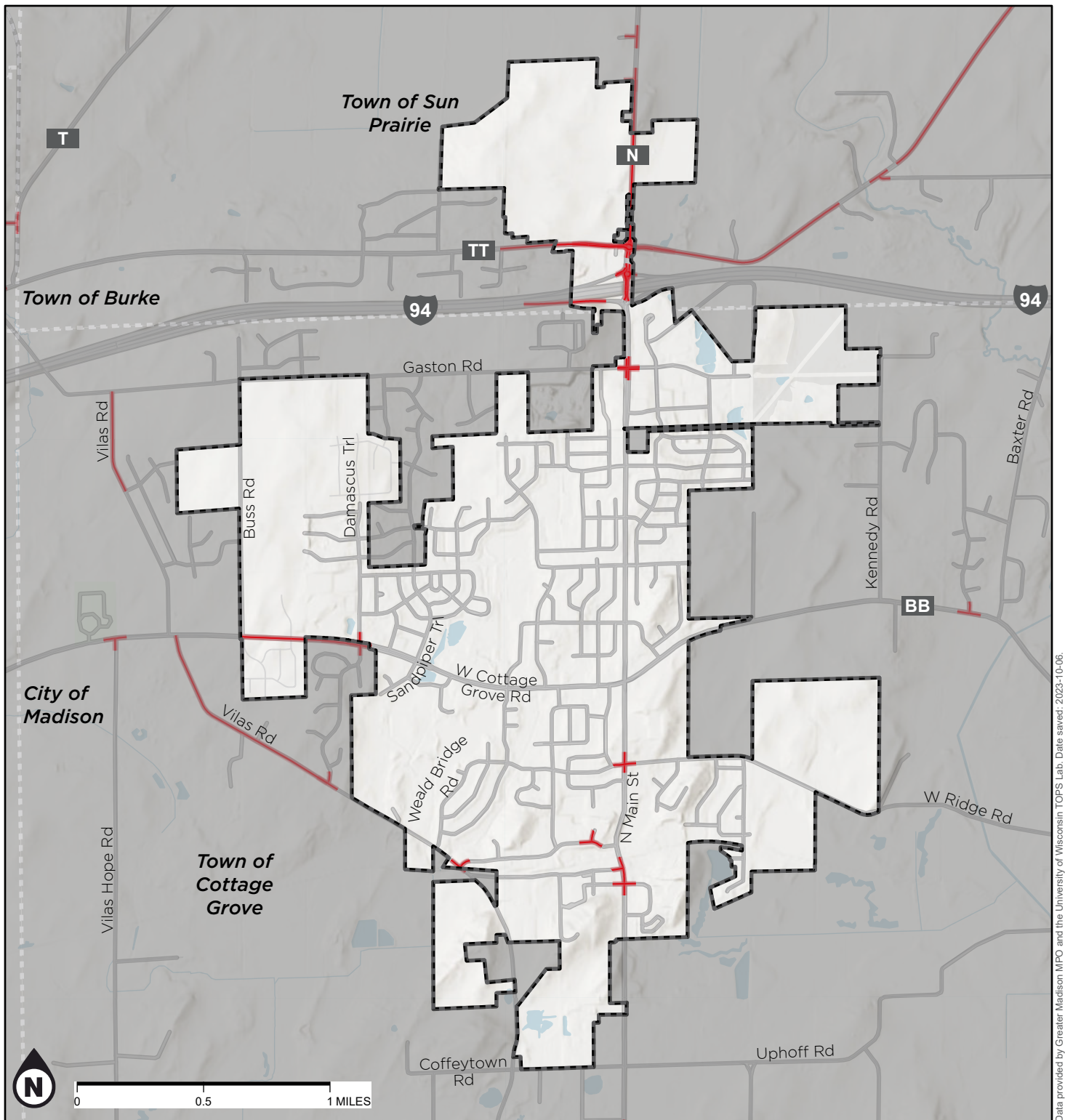
## HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab. Date saved: 2023-10-06.

## VILLAGE OF COTTAGE GROVE HIN (2017 - 2020) SEGMENTS AND INTERSECTIONS

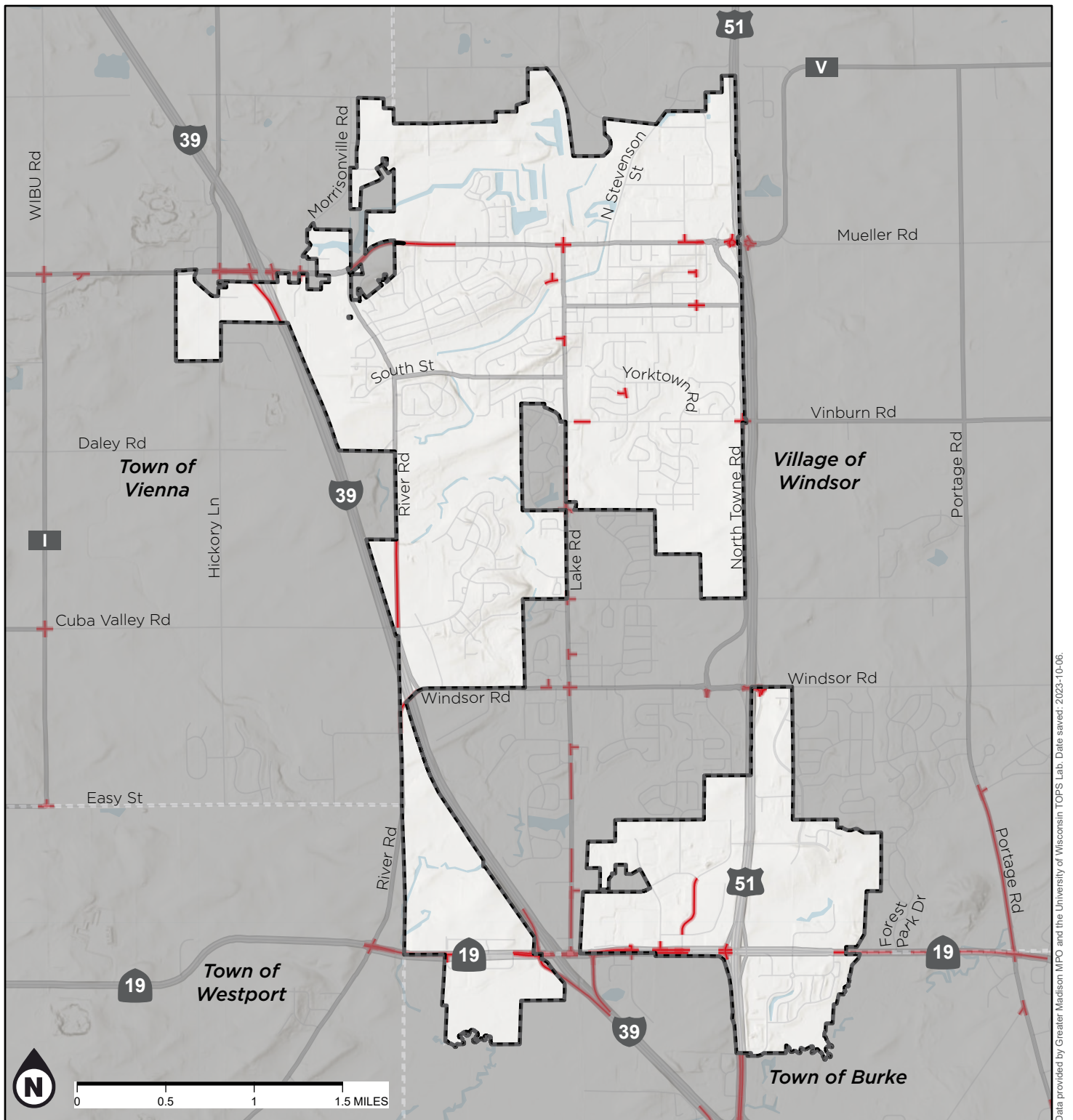
MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK  
 City, Village, or Town  
 HIN Roadway or Intersection Segment

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## VILLAGE OF DEFOREST HIN (2017 - 2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

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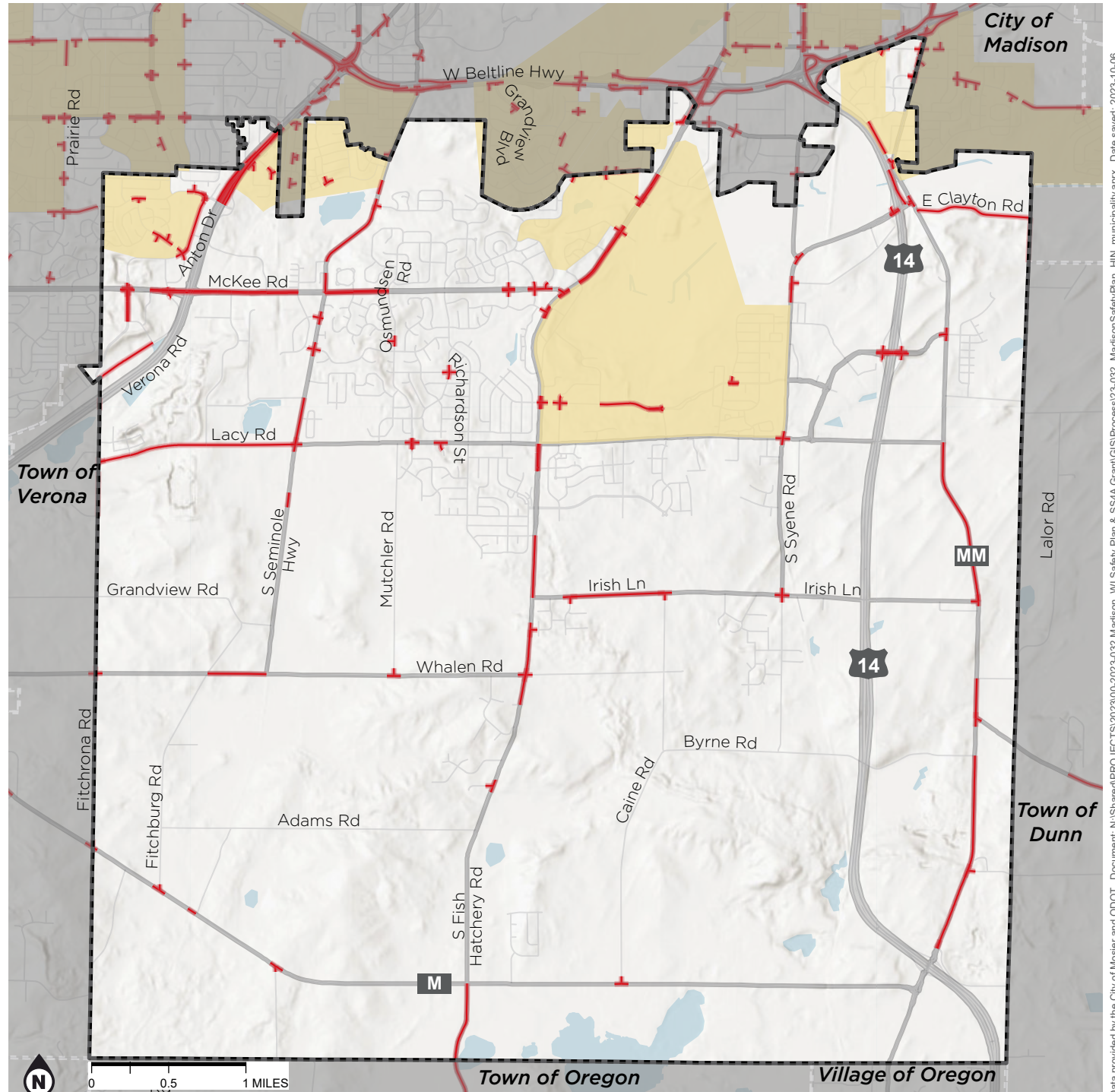


# CITY OF FITCHBURG HIN (2017-2020) SEGMENTS AND INTERSECTIONS

## MADISON MPO SAFETY ACTION PLAN

### HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area

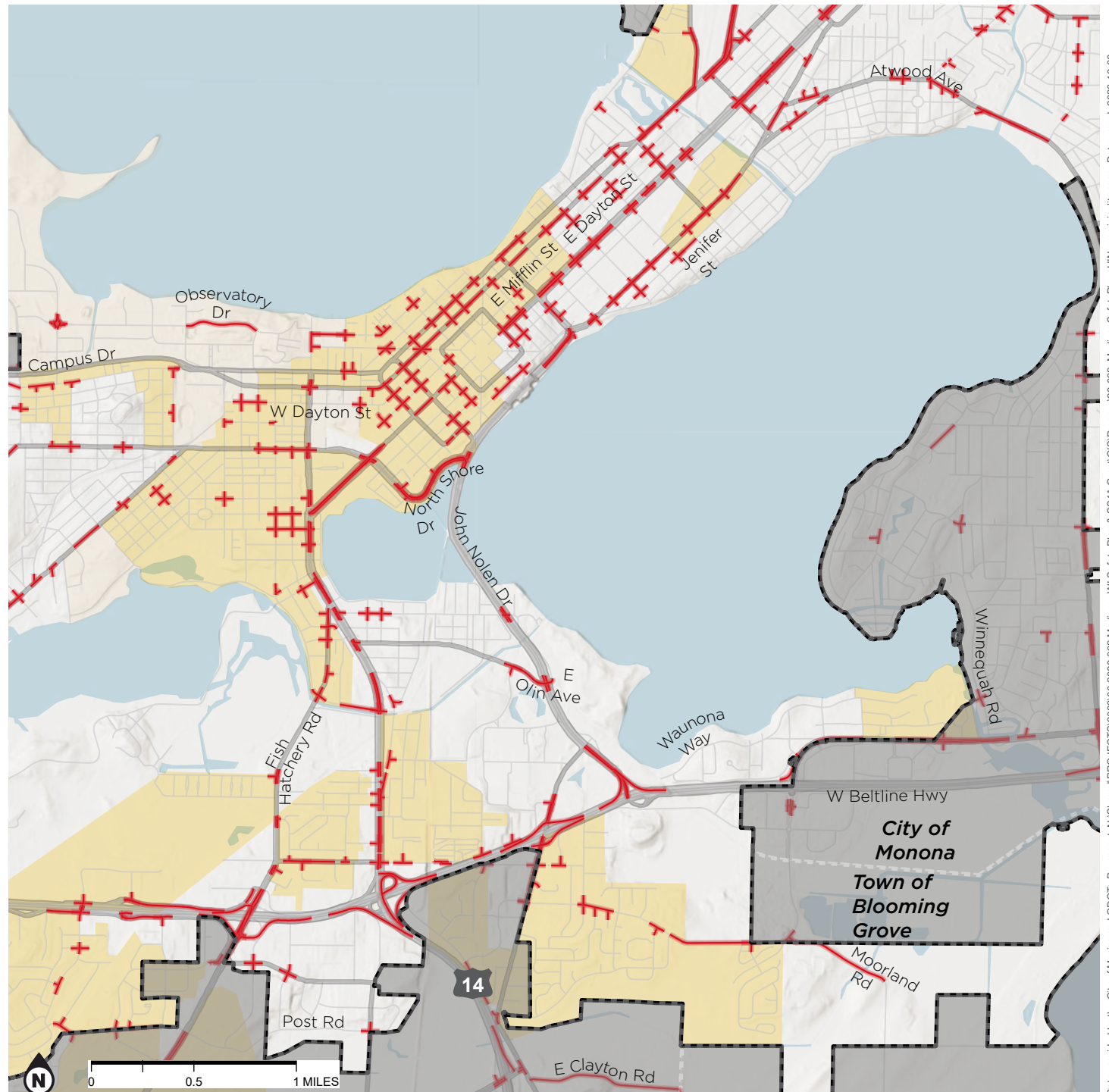


# CITY OF MADISON CENTRAL HIN (2017-2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

## HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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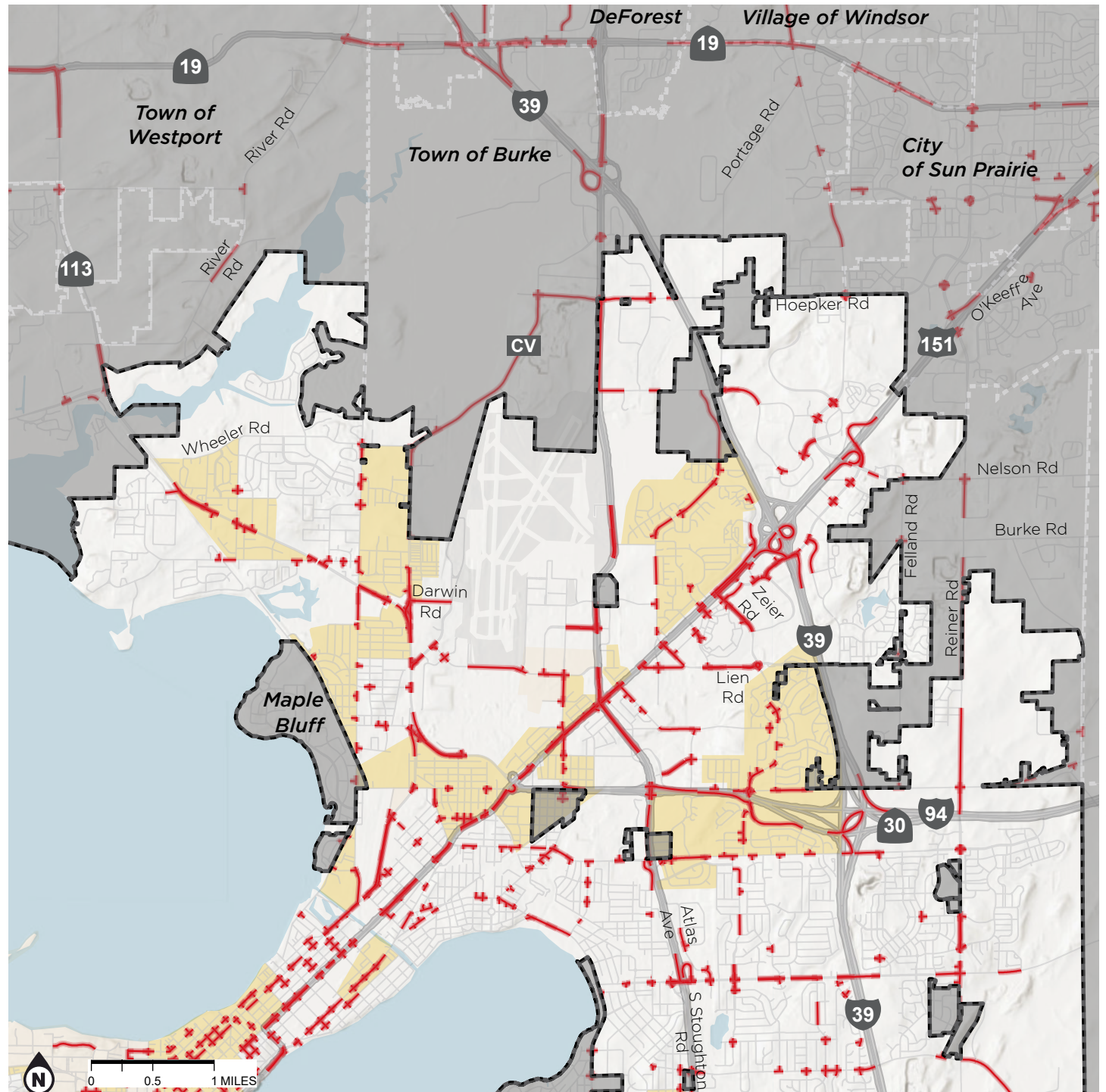


# CITY OF MADISON NORTHEAST HIN (2017-2020) SEGMENTS AND INTERSECTIONS

## MADISON MPO SAFETY ACTION PLAN

### HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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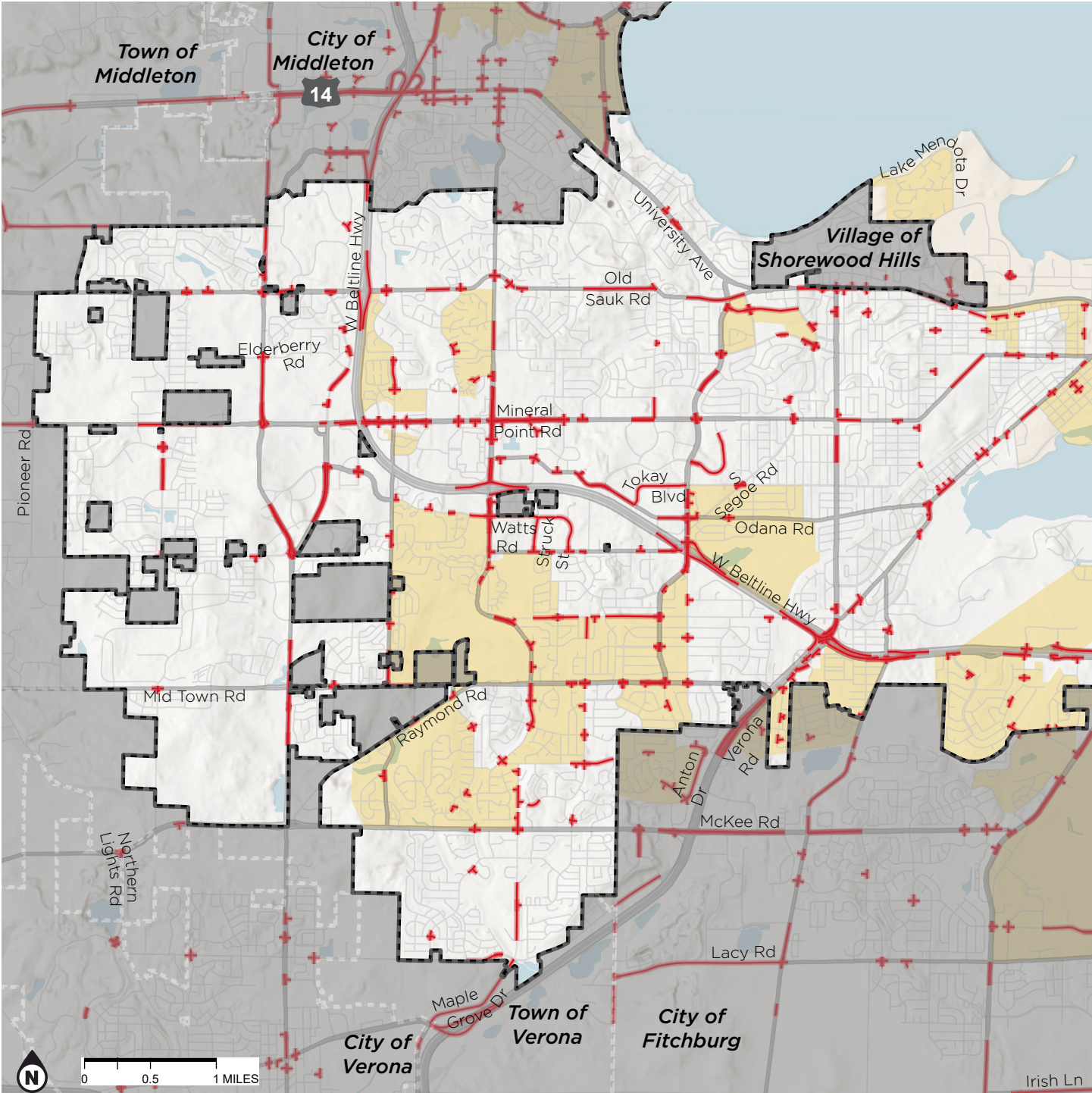
GREATER MADISON  
mpo

CITY OF MADISON  
WEST  
HIN (2017-2020)  
SEGMENTS AND  
INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



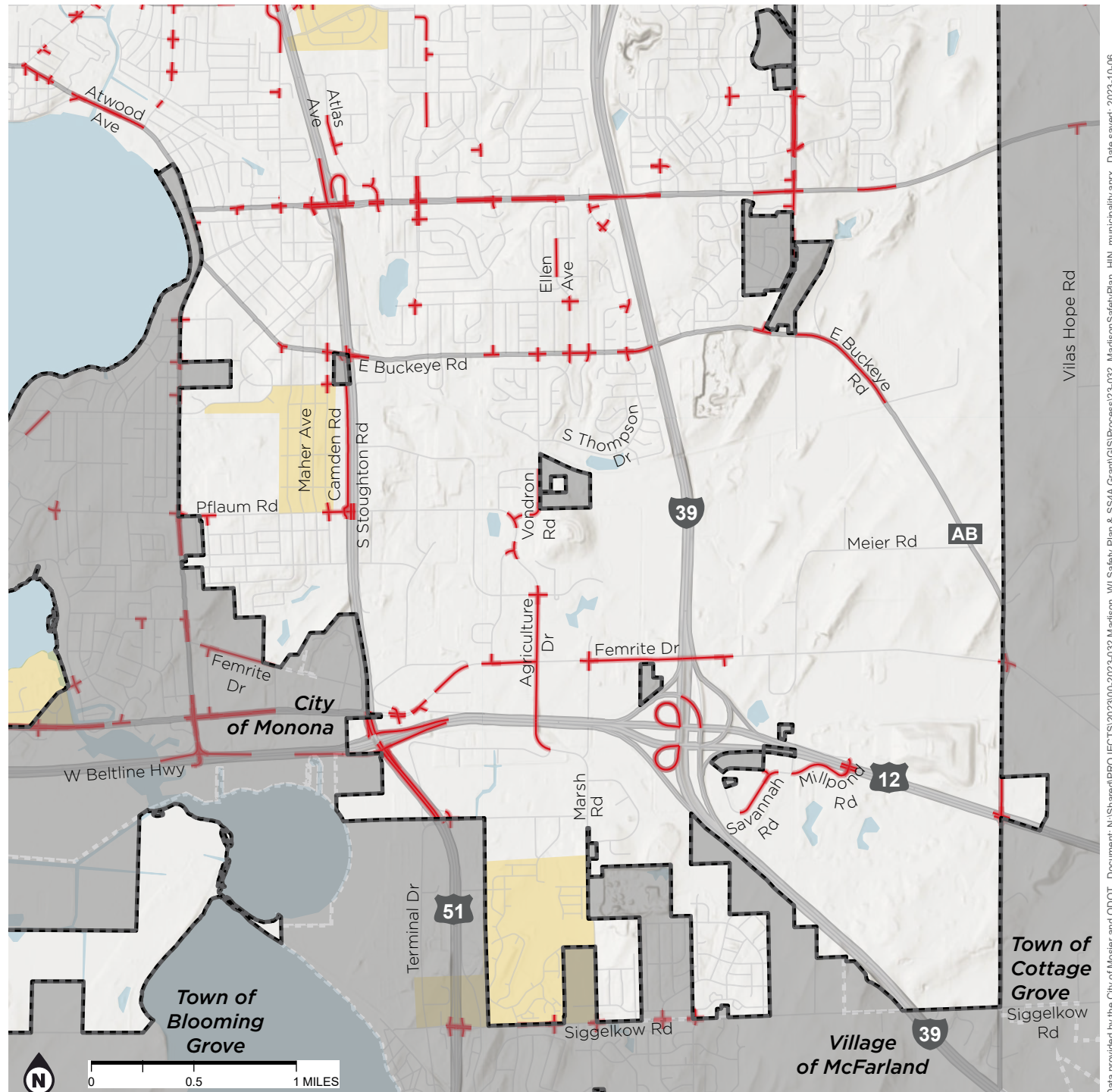


# CITY OF MADISON SOUTHEAST HIN (2017-2020) SEGMENTS AND INTERSECTIONS

## MADISON MPO SAFETY ACTION PLAN

### HIGH INJURY NETWORK

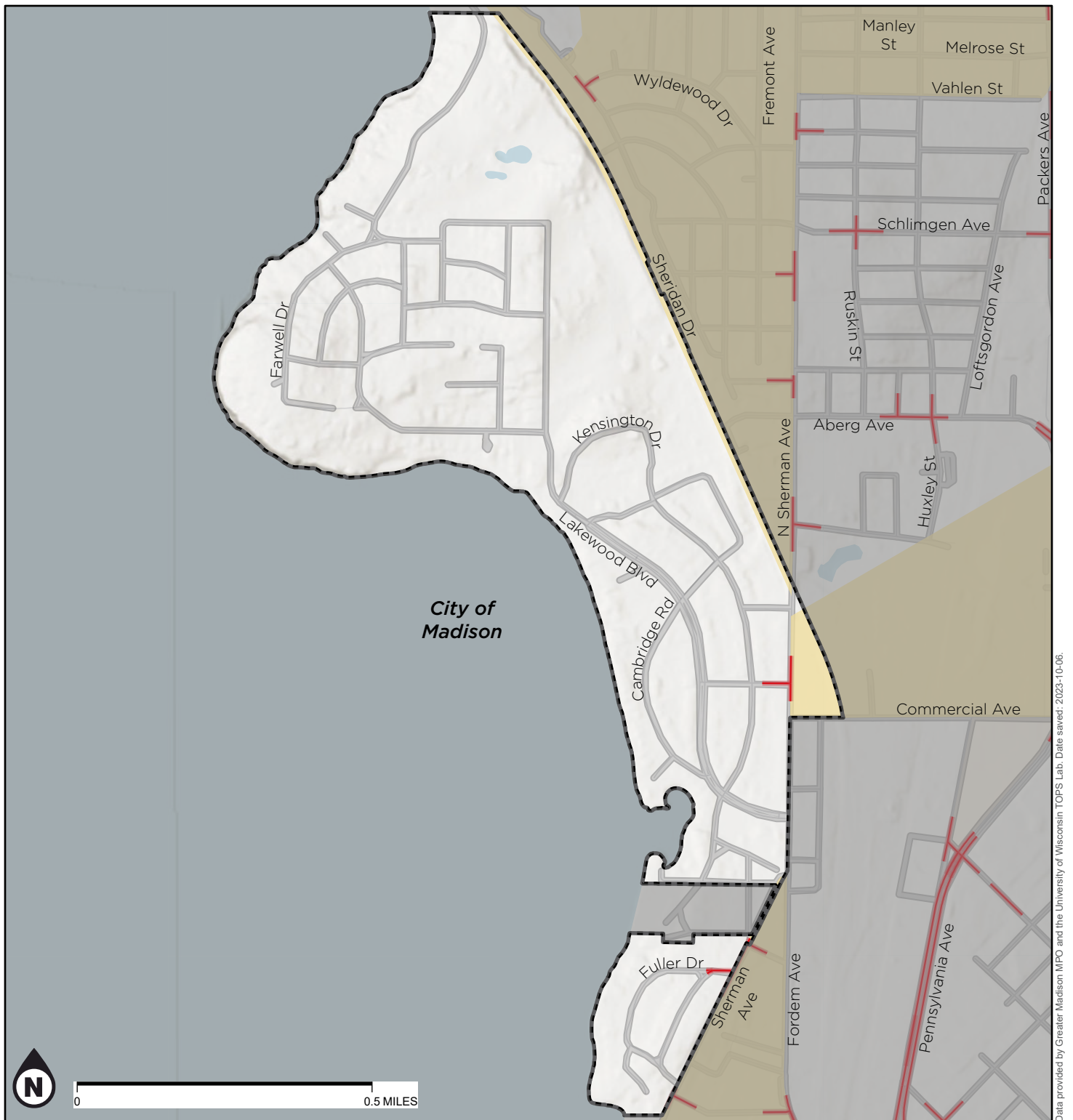
- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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## VILLAGE OF MAPLE BLUFF HIN (2017 - 2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

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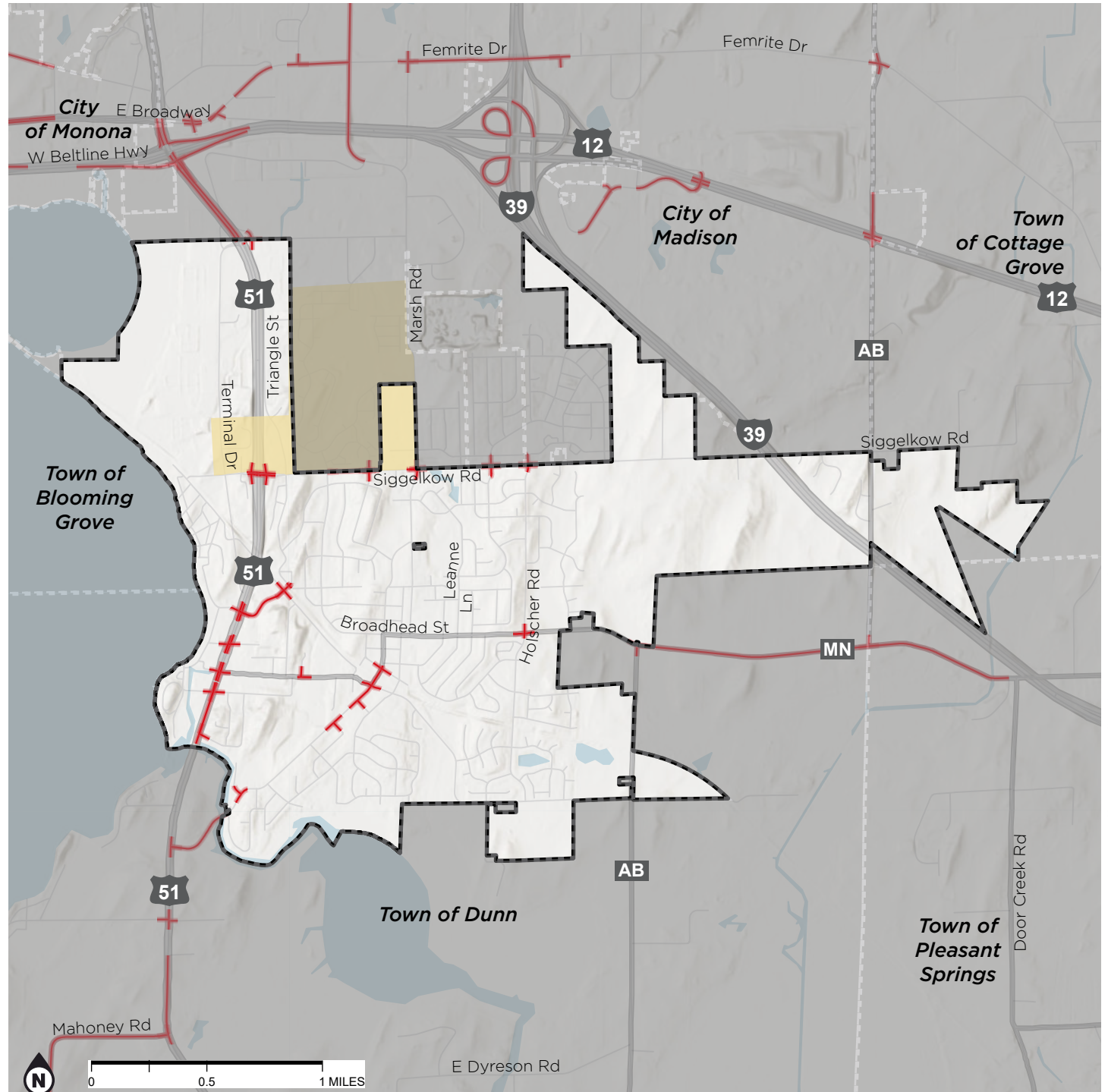


# VILLAGE OF MCFARLAND HIN (2017-2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

## HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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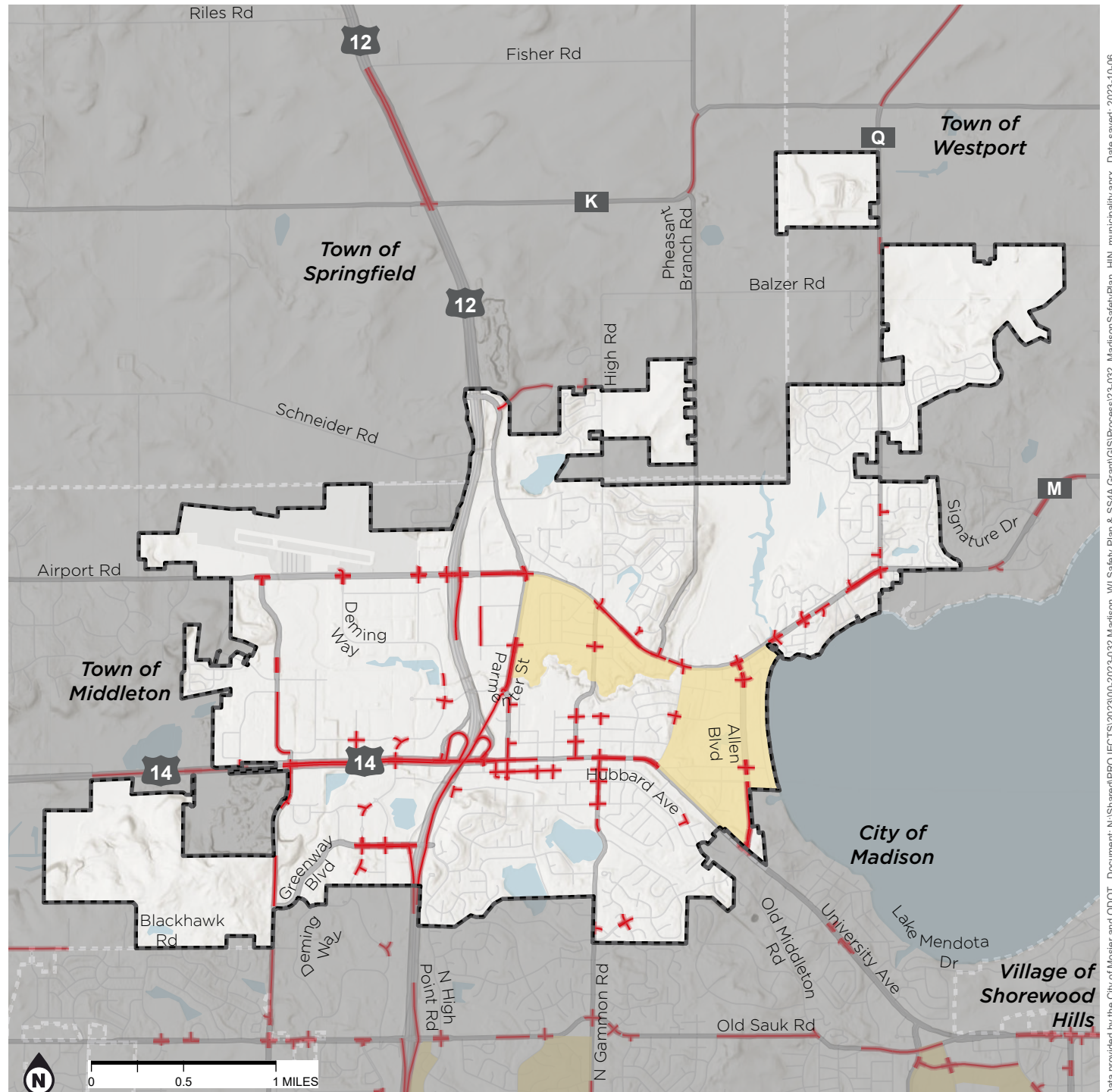


# CITY OF MIDDLETON HIN (2017-2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

## HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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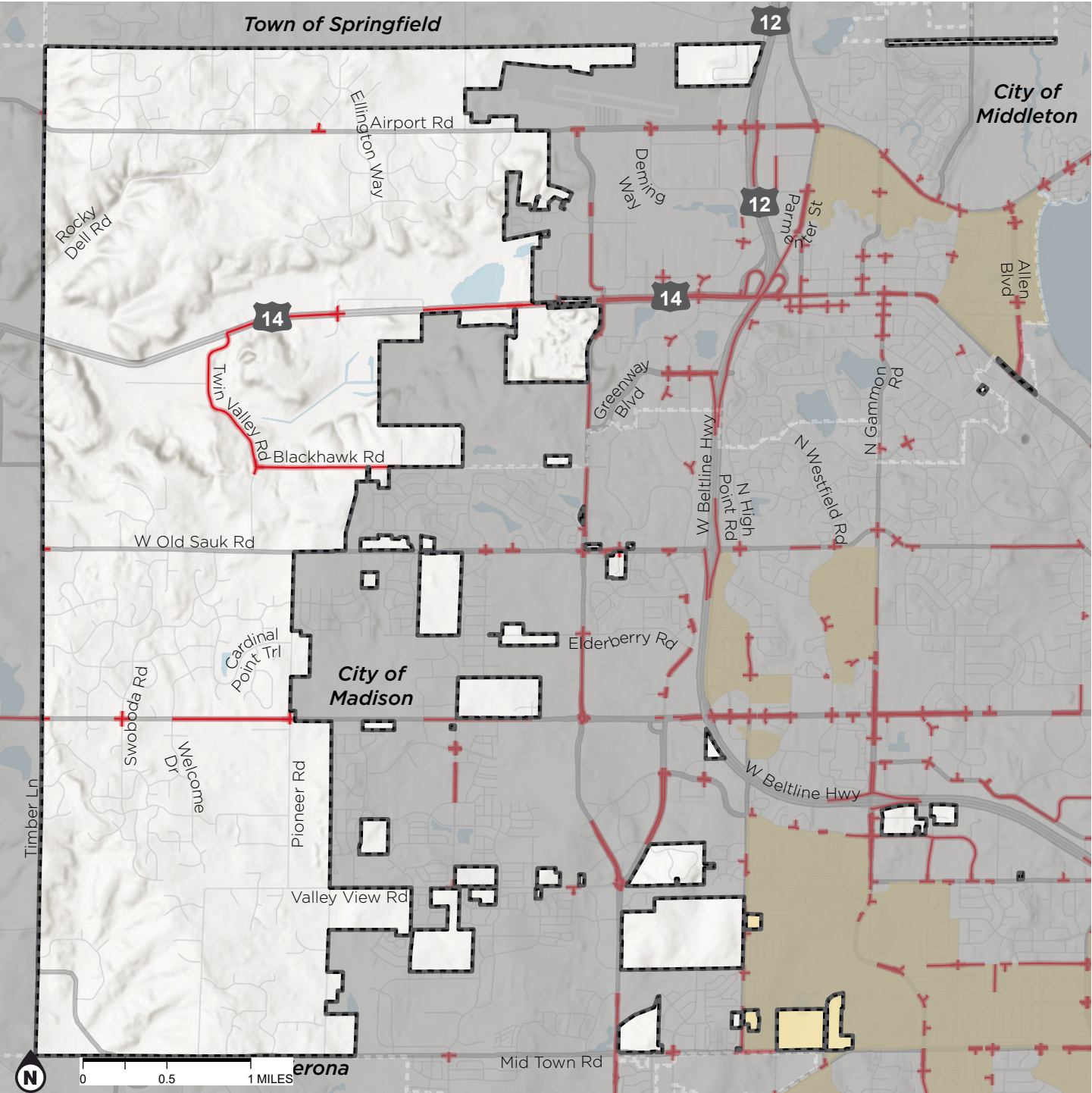




TOWN OF  
MIDDLETON  
HIN (2017-2020)  
SEGMENTS AND  
INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

- HIGH INJURY NETWORK
- HIN Roadway or Intersection Segment
  - City, Village, or Town
  - Tier 1 or Tier 2 EJ Area



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Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab. Date saved: 2023-10-06.

## CITY OF MONONA HIN (2017 - 2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

### HIGH INJURY NETWORK

- City, Village, or Town
- HIN Roadway or Intersection Segment
- Tier 1 or Tier 2 EJ Area

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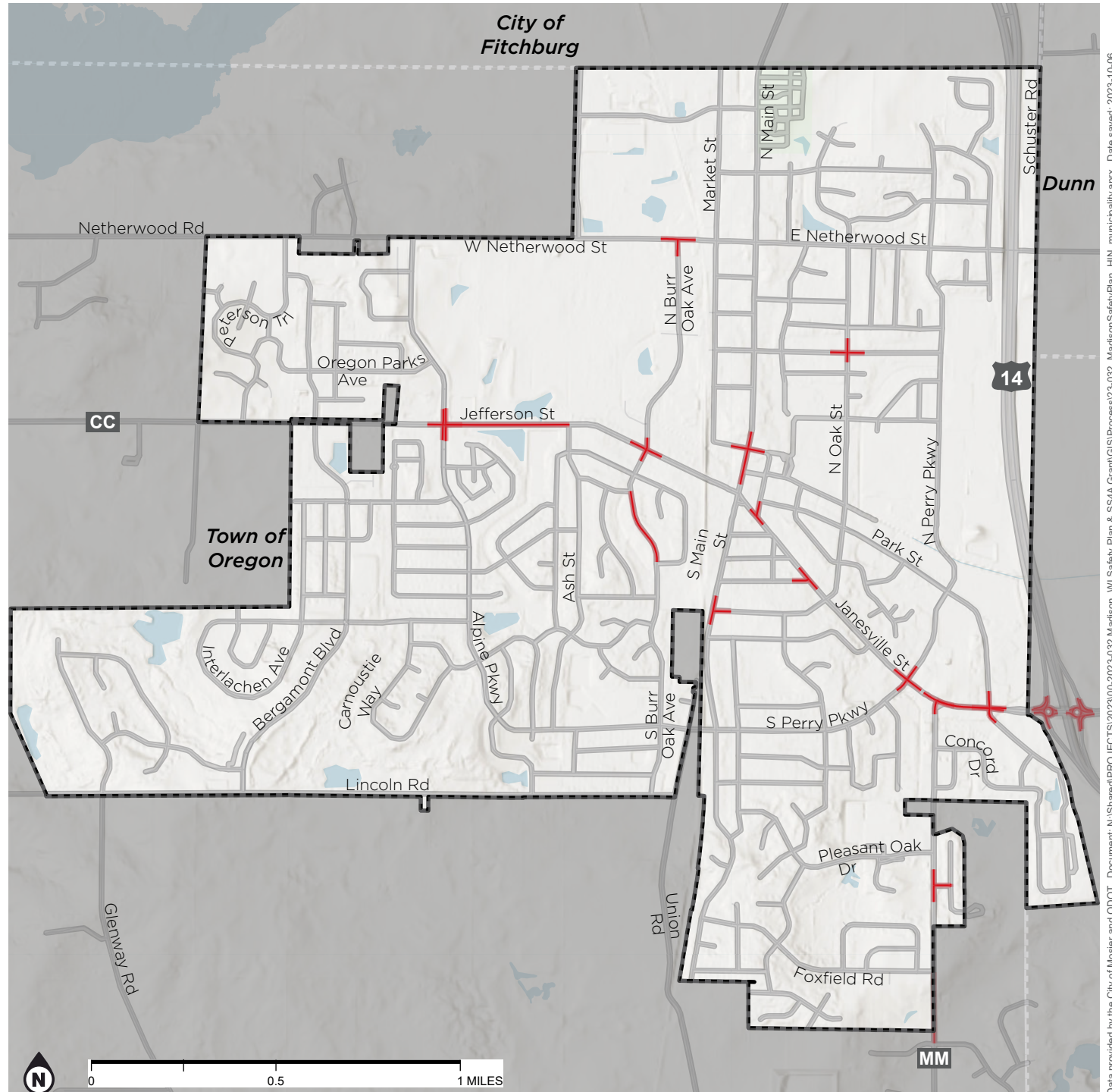


# VILLAGE OF OREGON HIN (2017-2020) SEGMENTS AND INTERSECTIONS

## MADISON MPO SAFETY ACTION PLAN

### HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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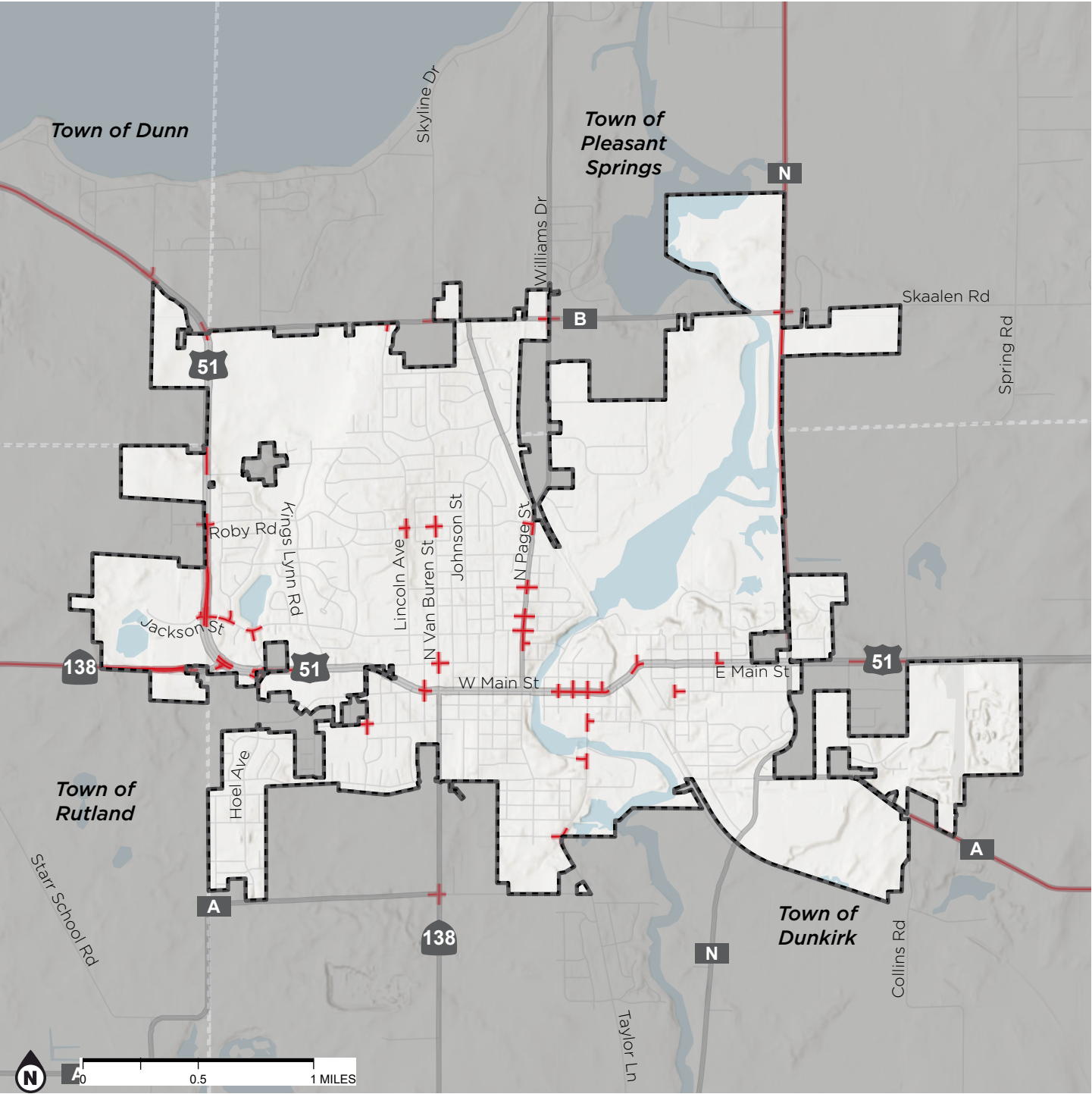


CITY OF  
STOUGHTON  
HIN (2017-2020)  
SEGMENTS AND  
INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



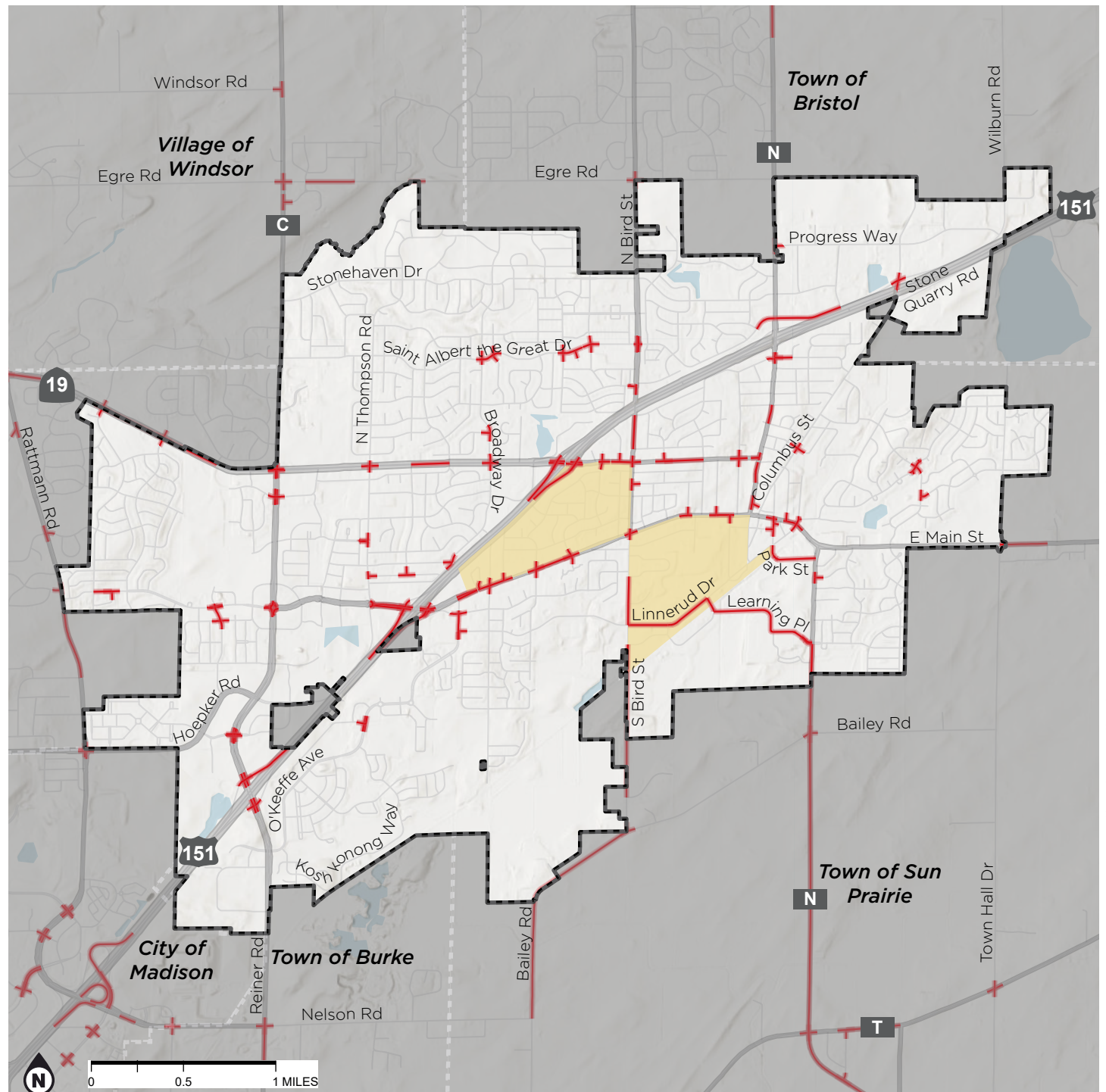


# CITY OF SUN PRAIRIE HIN (2017-2020) SEGMENTS AND INTERSECTIONS

## MADISON MPO SAFETY ACTION PLAN

### HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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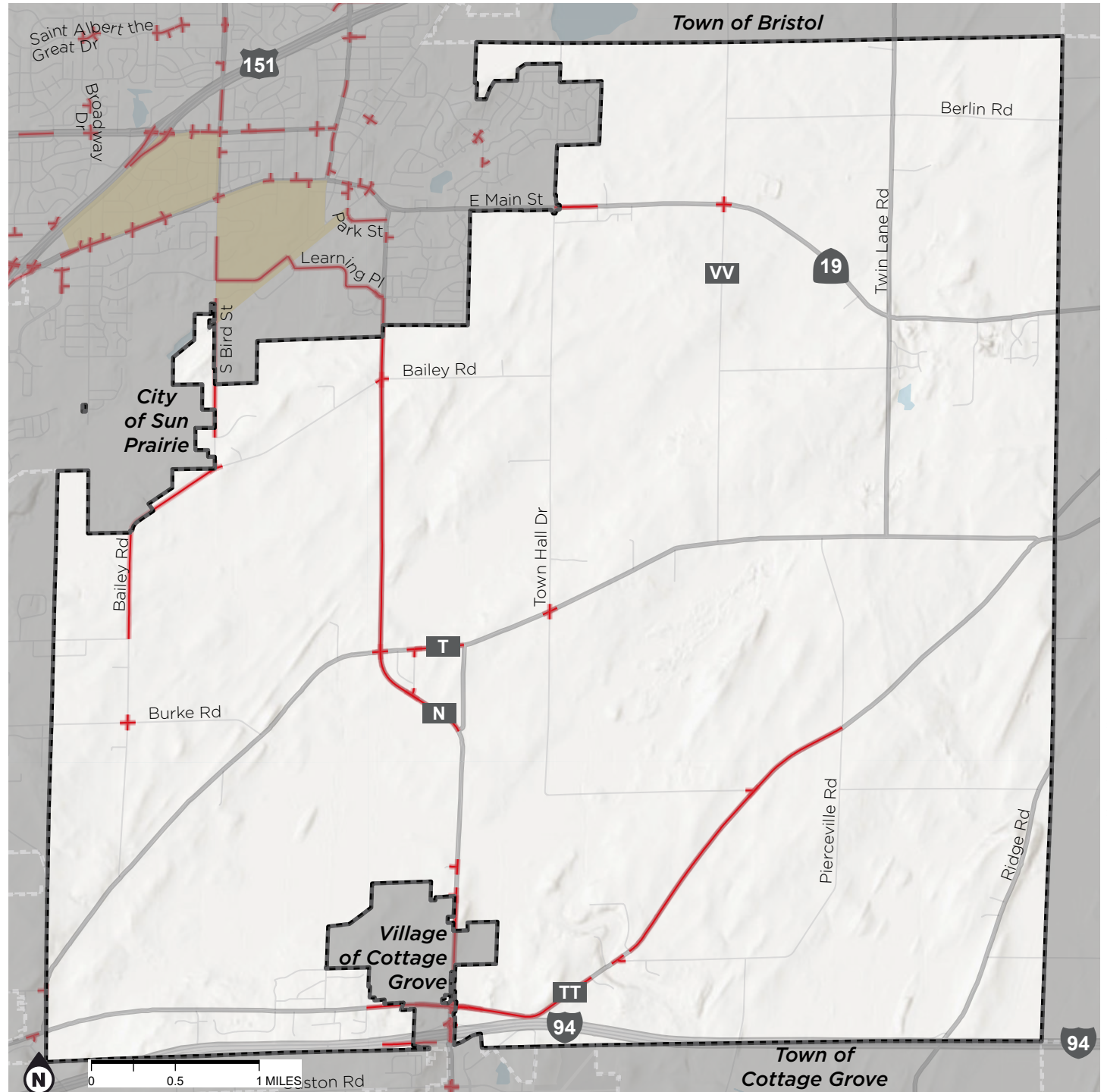


# TOWN OF SUN PRAIRIE HIN (2017-2020) SEGMENTS AND INTERSECTIONS

## MADISON MPO SAFETY ACTION PLAN

### HIGH INJURY NETWORK

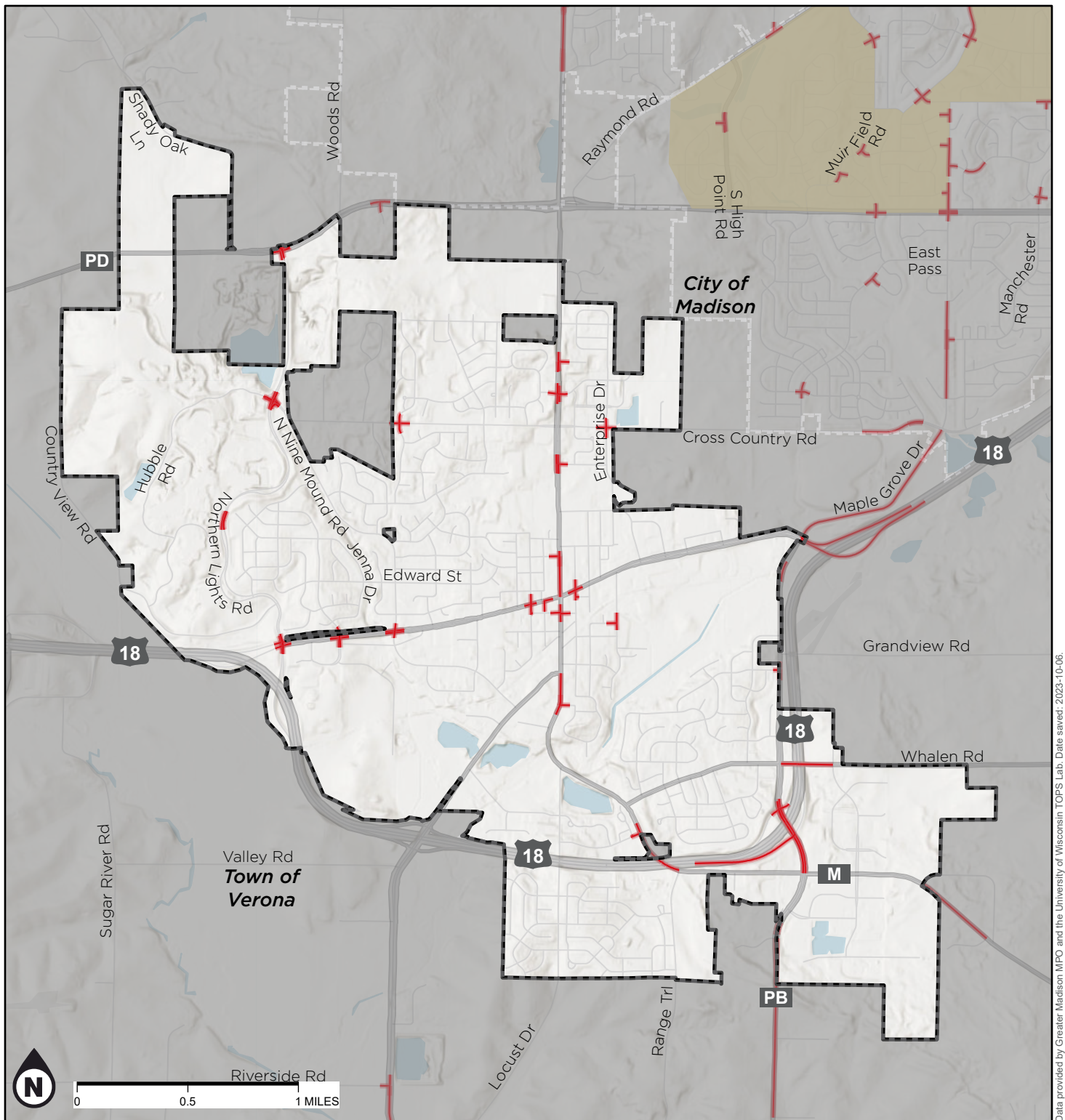
- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



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Data provided by Greater Madison MPO and the University of Wisconsin TOPS Lab. Date saved: 2023-10-06.

## CITY OF VERONA HIN (2017 - 2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

### HIGH INJURY NETWORK

- City, Village, or Town
- HIN Roadway or Intersection Segment

**alta**



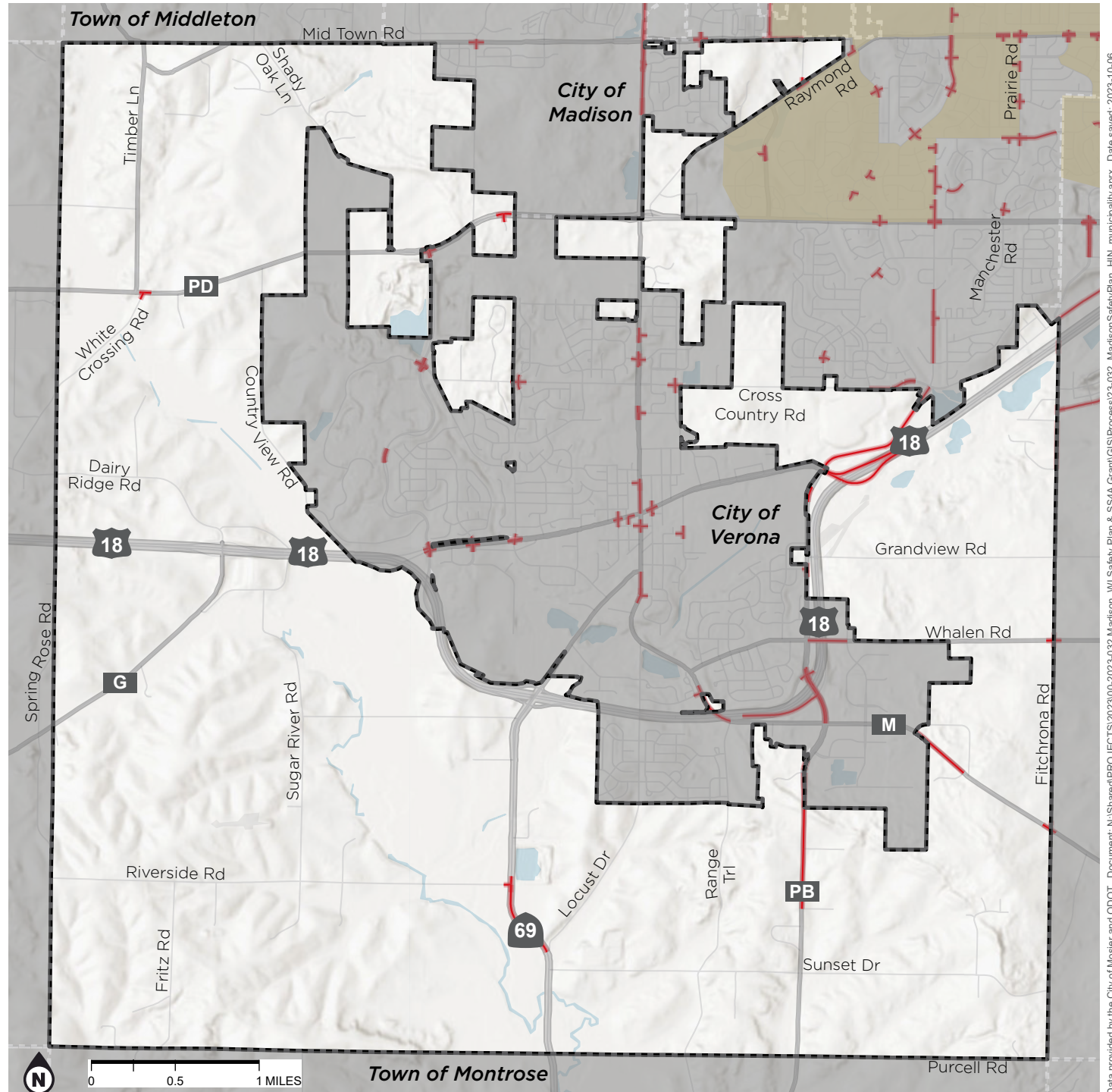


# TOWN OF VERONA HIN (2017-2020) SEGMENTS AND INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

## HIGH INJURY NETWORK

- HIN Roadway or Intersection Segment
- City, Village, or Town
- Tier 1 or Tier 2 EJ Area



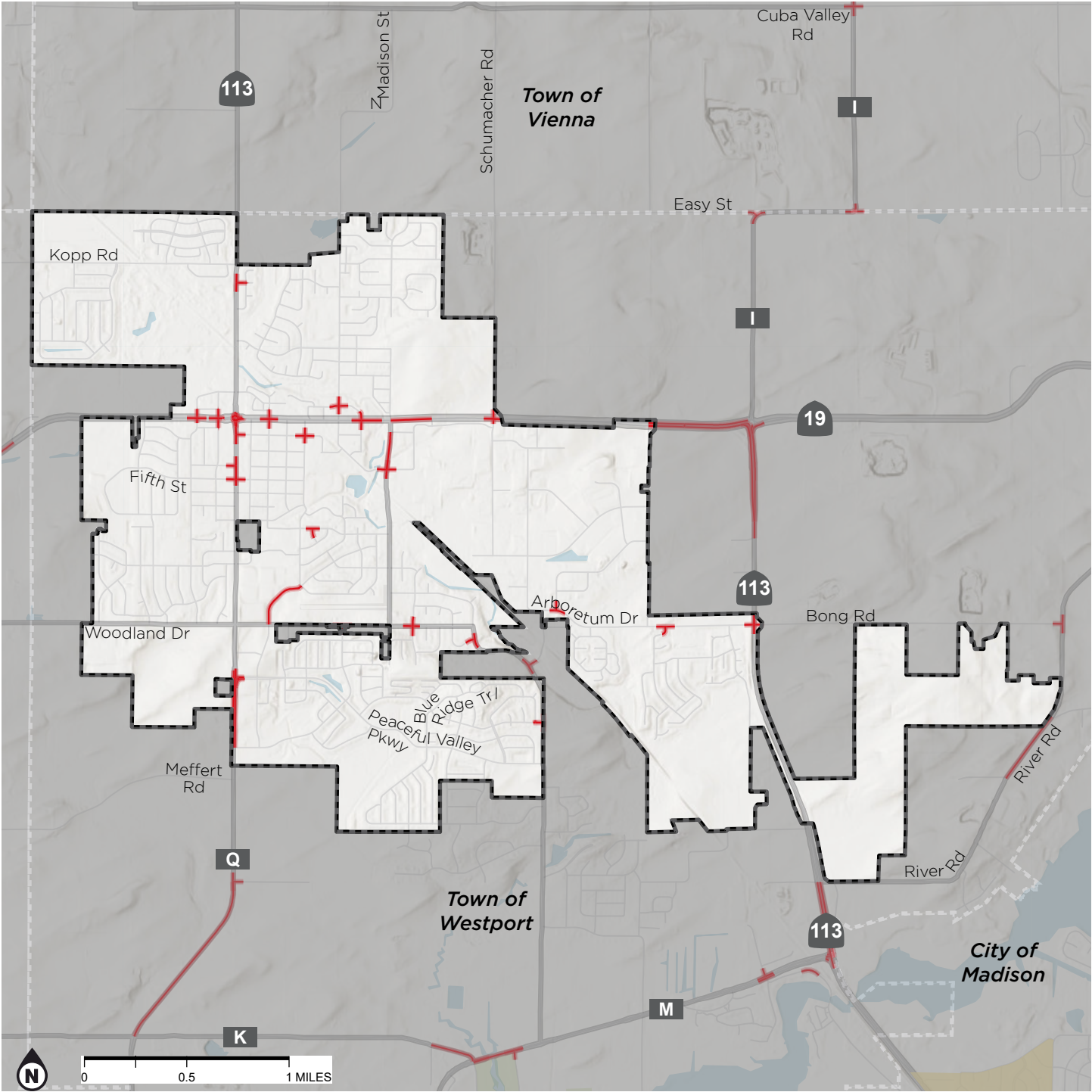
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VILLAGE OF  
WAUNAKEE  
HIN (2017-2020)  
SEGMENTS AND  
INTERSECTIONS

MADISON MPO  
SAFETY ACTION PLAN

- HIGH INJURY NETWORK
- HIN Roadway or Intersection Segment
  - City, Village, or Town
  - Tier 1 or Tier 2 EJ Area



# Appendix 6 - Equity Analysis Approach



To: Colleen Hoesly, Greater Madison MPO

From: Alta Planning + Design

Date: August 2023

Re: Task 2.3 Equity Analysis Memorandum

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The Greater Madison MPO (MPO) is committed to understanding how their High Injury Network (HIN) relates to areas of equity concern around the region. Using equity areas identified for recent regional transportation planning efforts, this memorandum outlines key patterns and considerations for how equity areas bare a disproportionate burden of transportation safety concerns around the greater Madison region.

## Madison MPO Environmental Justice Areas

### Approach Summary

The Greater Madison MPO (MPO) developed a methodology to prioritize equity areas within the region for transportation investments. To do so, the MPO defined two tiers of Environmental Justice (EJ) Areas based on the concentrations of low-income and racial/ethnic minority residents.

The MPO began this approach during the 2021-2025 regional Transportation Improvement Plan (TIP). The effort used US Census data to identify concentrations of minority (non-White and/or Hispanic) and low-income residents (those with household incomes below 150% of the federal poverty level). These two metrics formed the basis of a Minority Score and Poverty Score, with 0 to 4 points awarded for each based on relative presence compared to the region.

The MPO made additional adjustments to scores based on local understanding. Because of the large margin of error in the American Community Survey household income data, some areas were awarded additional points to correct what MPO staff believed to be underestimates of their low-income population. Additional points were only awarded to zones with a high proportion of students eligible for free and reduced-price school lunches. The MPO also adjusted block group geographies to generally exclude non-residential land uses, with the exception of some schools and parks. These efforts fine-tuned portions of Census block groups to be included as Tier 1 Environmental Justice Areas.

After using this methodology for the 2021-2025 TIP, the MPO developed a second tier of EJ Areas with slightly lower concentrations of vulnerable populations than the original EJ Areas (Tier 1 EJ Areas), but which still have higher-than-average concentrations of these populations. The resulting two-tiered EJ Areas approach was first used in the 2022-2026 TIP and forms the basis of the following HIN comparison.

### Comparison to Federal Metrics

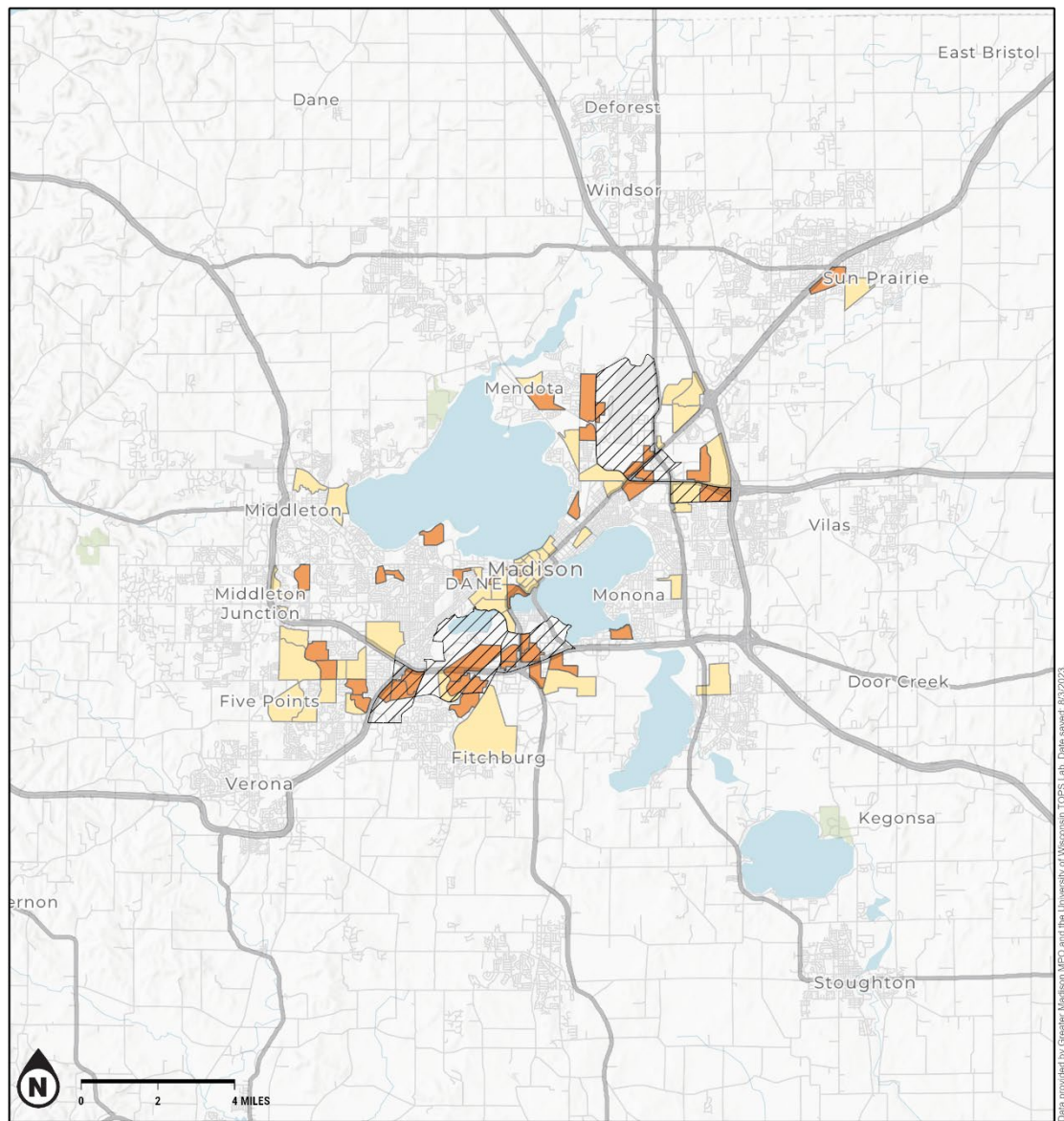
The MPO's Safety Action Plan is intended to position the Greater Madison MPO for Safe Streets for All implementation funding. The equity analysis required for that application has changed in the first two iterations of the grant, as federal best practice and available tools have evolved. Given the evolving nature of these best practices, and the significant work that the MPO has put into identifying an equity analysis process that considers local nuances, the equity analysis for the Safety Action Plan will be utilizing the analysis developed by the MPO, which defined Tier 1 and Tier 2 Environmental Justice Areas.



The current federal tool to understand overburdened and underserved areas is the Climate and Economic Justice Screening Tool (CEJST) from the US Council on Environmental Quality. The tool identifies Census tracts that are considered disadvantaged based on environmental, climate, socioeconomic, or other burdens. Categories include health, housing, legacy pollution, transportation, workforce development, and others. Communities qualify as disadvantaged if they surpass percentile thresholds for one environmental or other burden, as well as an associated socioeconomic burden.

Madison MPO Tier 1 and Tier 2 EJ Areas are mapped alongside the CEJST areas in Figure 1. This map shows where the Madison MPO is more refined to local context than the federal designation. For example, the CEJST designation includes the entire Dane County Regional Airport, while the Madison MPO EJ Tiers highlight the residential areas on the perimeter of the airport that more accurately reflect where burdened residents live. Another difference is around the University of Wisconsin Arboretum. The federal designation includes the entire Census tract, while the Madison MPO designation highlights only the most affected block groups where burdened residents live.





# ENVIRONMENTAL JUSTICE AREA COMPARISON

MADISON MPO  
SAFETY ACTION PLAN

## ENVIRONMENTAL JUSTICE AREA



-  Climate and Economic Justice Screening Tool - Disadvantaged Area
-  Madison MPO - Tier 1
-  Madison MPO - Tier 2

Figure 1. Comparison of USDOT and Greater Madison MPO Equity Areas

## EJ Area Overlap with the HIN

Tier 1 and Tier 2 EJ Areas are spread across the MPO region. The City of Madison has the highest number of roadway miles in EJ Areas (337 miles), followed by the City of Fitchburg (41 miles), the City of Sun Prairie (16 miles), and the City of Middleton (13 miles).

HIN roadway segments and intersections are overrepresented in EJ Areas. Tier 1 and Tier 2 EJ Areas cover only 8% of region's roadway miles; however, EJ Areas account for 17% of HIN miles in the region, and 29% of HIN intersections. Table 1 shows the distribution of HIN miles in Tier 1 and Tier 2 EJ Areas around the MPO region, displayed by jurisdiction.

Table 1. Distribution of HIN Roadway Segments in Tier 1 and Tier 2 EJ Areas

Jurisdiction	Total Roadway Miles in Tier 1 and Tier 2 EJ Areas	Percent HIN Miles in Tier 1 and Tier 2 Areas
City of Madison	336.6	8.8%
City of Fitchburg	40.9	10.3%
City of Sun Prairie	15.5	19.4%
City of Middleton	13.1	11.5%
Town of Blooming Grove	6.2	-
Village of McFarland	4.6	6.5%
Town of Burke	4.5	24.4%
City of Monona	0.9	-
Village of Maple Bluff	0.7	-
Town of Middleton	0.4	25%

## Additional Analysis

The Safety Action Plan analysis identified a total of 11 crash profiles that represent the most prevalent types of severe crashes, by mode. As a next step, these crash profiles will be compared to the MPO's Tier 1 and 2 EJ Areas, to determine the link and impact level of severe crashes in disadvantages areas.